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# INDEX AND SUMMARY OF H. R. 13273

## LEGISLATIVE HISTORY

Public Law 87-874

H. R. 13273

Sept. 26, 1961 Sen. Davis, Tenn., introduced H. R. 13273 which the House Public Works Committee reported as original bill, H. R. 3773, without amendments. S. Report No. 7252. Print of bill and report.

Oct. 1, 1961 House committee reported H. R. 13273 with amendments. H. Report No. 2504. Print of bill and report.

Oct. 2, 1961 House Committee reported resolution for the consideration of H. R. 13273.

Oct. 3, 1961 House passed H. R. 13273 with amendments.

Oct. 4, 1961 H. R. 13273 was placed on Senate calendar.

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S. 3773 indefinitely postponed due to passage of H. R. 13273.

Oct. 5, 1961 Rep. Saylor objected to request to appoint conferees.

Oct. 10, 1961 House conferees were appointed.

Rep. Saylor criticized bill as passed by Senate.

Oct. 12, 1961 House received and agreed to conference report on H. R. 13273. H. Report No. 1577. Print of report.

Oct. 13, 1961 Senate agreed to conference report.

Oct. 23, 1961 Approved: Public Law 87-874.

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H. R. 13273.





## INDEX AND SUMMARY OF H. R. 13273

- Sept. 28, 1962 Rep. Davis, Tenn., introduced H. R. 13273 which was referred to the House Public Works Committee. Print of bill as introduced.
- Oct. 1, 1962 Senate Public Works Committee reported an original bill, S. 3773, without amendment. S. Report No. 2258. Print of bill and report.
- House committee reported H. R. 13273 with amendments. H. Report No. 2504. Print of bill and report.
- Oct. 2, 1962 Rules Committee reported resolution for the consideration of H. R. 13273.
- Oct. 3, 1962 House passed H. R. 13273 with amendment.
- Oct. 4, 1962 H. R. 13273 was place on Senate calendar.
- Senate passed H. R. 12373 with amendments. Senate conferees were appointed.
- S. 3773 indefinitely postponed due to passage of H. R. 12373.
- Oct. 5, 1962 Rep. Saylor objected to request to appoint conferees.
- Oct. 10, 1962 House conferees were appointed.
- Rep. Saylor criticized bill as passed by Senate.
- Oct. 12, 1962 House received and agreed to conference report on H. R. 13273. H. Report No. 2557. Print of report.
- Oct. 13, 1962 Senate agreed to conference report.
- Oct. 23, 1962 Approved: Public Law 87-874.

**Hearings:** House Public Works Committee on  
H. R. 13273.





DIGEST OF PUBLIC LAW 87-874

OMNIBUS RIVER AND HARBOR AND FLOOD CONTROL ACT OF 1962.  
Provides authorizations for the construction of various specified river and harbor and flood control projects. Amends provisions of prior river and harbor and flood control acts with respect to the sharing of costs between the Federal Government and non-Federal entities for certain features of authorized projects which will now make such cost-sharing different from the amount of Federal assistance which may be provided for some of the purposes served by improvements which may be undertaken under the provisions of the Watershed Protection and Flood Prevention Act administered by the Department of Agriculture.









87<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

# H. R. 13273

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## IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 28, 1962

Mr. DAVIS of Tennessee introduced the following bill; which was referred to the Committee on Public Works

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## A BILL

Authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3               **TITLE I—RIVERS AND HARBORS**

4       SEC. 101. That the following works of improvement of  
5 rivers and harbors and other waterways for navigation, flood  
6 control, and other purposes are hereby adopted and author-  
7 ized to be prosecuted under the direction of the Secretary of  
8 the Army and supervision of the Chief of Engineers, in ac-  
9 cordance with the plans and subject to the conditions rec-  
10 ommended by the Chief of Engineers in the respective



1 reports hereinafter designated: *Provided*, That the provisions  
2 of section 1 of the River and Harbor Act approved March  
3 2, 1945 (Public Law Numbered 14, Seventy-ninth Con-  
4 gress, first session), shall govern with respect to projects  
5 authorized in this title; and the procedures therein set forth  
6 with respect to plans, proposals, or reports for works of  
7 improvement for navigation or flood control and for irriga-  
8 tion and purposes incidental thereto, shall apply as if herein  
9 set forth in full:

10 NAVIGATION

11 Narraguagus River, Maine: House Document Numbered  
12 530, Eighty-seventh Congress, at an estimated cost of  
13 \$500,000;

14 Carvers Harbor, Vinalhaven, Maine: Senate Document  
15 Numbered 118, Eighty-seventh Congress, at an estimated  
16 cost of \$205,000;

17 Searsport Harbor, Maine: House Document Numbered  
18 500, Eighty-seventh Congress, at an estimated cost of  
19 \$700,000;

20 Portland Harbor, Maine: House Document Numbered  
21 216, Eighty-seventh Congress, at an estimated cost of  
22 \$8,340,000;

23 Kennebunk River, Maine: House Document Numbered  
24 459, Eighty-seventh Congress, at an estimated cost of  
25 \$270,000;



1        Portsmouth Harbor and Piscataqua River, Maine and  
2 New Hampshire: House Document Numbered 482, Eighty-  
3 seventh Congress, at an estimated cost of \$7,500,000;

4        Gloucester Harbor, Massachusetts: House Document  
5 Numbered 341, Eighty-seventh Congress, at an estimated  
6 cost of \$1,100,000;

7        Marblehead Harbor, Massachusetts: House Document  
8 Numbered 516, Eighty-seventh Congress, at an estimated  
9 cost of \$1,752,000;

10       Chelsea Harbor, Massachusetts: House Document Num-  
11 bered 350, Eighty-seventh Congress, at an estimated cost of  
12 \$2,843,000;

13       Dorchester Bay and Neponset River, Massachusetts:  
14 Senate Document Numbered 126, Eighty-seventh Congress,  
15 at an estimated cost of \$7,050,000;

16       Plymouth Harbor, Massachusetts: Senate Document  
17 Numbered 124, Eighty-seventh Congress, at an estimated  
18 cost of \$1,200,000;

19       Pawtuxet Cove, Rhode Island: House Document Num-  
20 bered 236, Eighty-seventh Congress, at an estimated cost  
21 of \$210,000;

22       Little Neck Bay, New York: House Document Num-  
23 bered 510, Eighty-seventh Congress, at an estimated cost  
24 of \$2,185,000;

25       Flushing Bay and Creek, New York: House Document

1   Numbered 551, Eigthy-seventh Congress, at an estimated  
2   cost of \$1,695,000;

3       Buttermilk Channel, New York: House Document Num-  
4   bered 483, Eighty-seventh Congress, at an estimated cost  
5   of \$2,226,000;

6       Newark Bay, Hackensack and Passaic Rivers, New  
7   Jersey (channels to Port Elizabeth): Modification of the  
8   existing navigation project authorized by the River and Har-  
9   bor Act of 1954 (Public Law 780, Eighty-third Congress),  
10   House Document Numbered 252, is hereby authorized sub-  
11   stantially in accordance with the plans being prepared by  
12   the Chief of Engineers.

13       Raritan River, New Jersey: House Document Num-  
14   bered 455, Eighty-sixth Congress, maintenance;

15       Lynnhaven Inlet, Bay, and connecting waters, Virginia:  
16   House Document Numbered —, Eighty-seventh Congress, at  
17   an estimated cost of \$1,068,000: *Provided*, That nothing in  
18   this Act shall be construed as authorizing reimbursement to  
19   local interests for the Long Creek-Broad Bay Canal Bridge;

20       Rollinson Channel and channel from Hatteras Inlet to  
21   Hatteras, North Carolina: House Document Numbered 457,  
22   Eighty-seventh Congress, at an estimated cost of \$652,000;

23       Wilmington Harbor, North Carolina: Senate Document  
24   Numbered 114, Eighty-seventh Congress, at an estimated  
25   cost of \$6,370,000;

1 Savannah Harbor, Georgia: Senate Document Num-  
2 bered 115, Eighty-seventh Congress, at an estimated cost  
3 of \$605,000;

4 Key West Harbor, Florida: Senate Document Num-  
5 bered 106, Eighty-seventh Congress, at an estimated cost  
6 of \$820,000;

7 Tampa Harbor, Port Sutton and Ybor Channels, Florida:  
8 House Document Numbered 529, Eighty-seventh Congress,  
9 at an estimated cost of \$997,000;

10 Walter F. George lock and dam, Alabama: Senate  
11 Document Numbered 109, Eighty-seventh Congress, at an  
12 estimated cost of \$500,000;

13 Pensacola Harbor, Florida: House Document Numbered  
14 528, Eighty-seventh Congress, at an estimated cost of  
15 \$424,000;

16 Holt lock and dam, Alabama: The Secretary of the  
17 Army is hereby authorized and directed to cause an immedi-  
18 ate study to be made under the direction of the Chief of  
19 Engineers with a view to providing hydroelectric power  
20 generating facilities in said dam, and such installation of  
21 necessary power facilities is hereby authorized as determined  
22 to be justified by the Secretary of the Army, unless within  
23 the first period of sixty calendar days of continuous session  
24 of the Congress after the date on which the report is sub-  
25 mitted to it such report is disapproved by the Congress.



1       Pascagoula Harbor, Mississippi: House Document Num-  
2       bered 560, Eighty-seventh Congress, at an estimated cost of  
3       \$4,870,000;

4       Mississippi River, Baton Rouge to Gulf of Mexico, Lou-  
5       isiana: Senate Document Numbered 36, Eighty-seventh  
6       Congress, at an estimated cost of \$357,000;

7       Gulf Intracoastal Waterway, Louisiana and Texas:  
8       House Document Numbered 556, Eighty-seventh Congress,  
9       at an estimated cost of \$25,540,000;

10       Calcasieu River Salt Water Barrier, Louisiana: House  
11       Document Numbered 582, Eighty-seventh Congress, at an  
12       estimated cost of \$3,310,000;

13       Mississippi River at Clarksville, Missouri: House Docu-  
14       ment Numbered 552, Eighty-seventh Congress, at an esti-  
15       mated cost of \$103,300;

16       Sandy Slough, Lincoln County, Missouri: House Docu-  
17       ment Numbered 419, Eighty-seventh Congress, at an esti-  
18       mated cost of \$195,000;

19       Sabine-Neches Waterway, Texas: House Document  
20       Numbered 553, Eighty-seventh Congress, at an estimated  
21       cost of \$20,830,000;

22       Trinity River, Wallisville Reservoir, Texas: House  
23       Document Numbered 215, Eighty-seventh Congress, at an  
24       estimated cost of \$9,162,000;

25       Gulf Intracoastal Waterway, channel to Palacios,

1 Texas: House Document Numbered 504, Eighty-seventh  
2 Congress, at an estimated cost of \$818,000;

3 Gulf Intracoastal Waterway, channel to Victoria, Texas:  
4 House Document Numbered 288, Eighty-seventh Congress,  
5 at an estimated cost of \$1,590,000;

6 Illinois Waterway, Illinois and Indiana: House Docu-  
7 ment Numbered 31, Eighty-sixth Congress, at an estimated  
8 cost of \$114,652,000;

9 Kaskaskia River, Illinois: Senate Document Numbered  
10 44, Eighty-seventh Congress, at an estimated cost of \$58,-  
11 200,000;

12 Mississippi River between Missouri River and Minne-  
13 apolis, Minnesota: House Document Numbered 513, Eighty-  
14 seventh Congress, at an estimated cost of \$1,205,000;

15 Ontonagon Harbor, Michigan: House Document Num-  
16 bered 287, Eighty-seventh Congress, at an estimated cost  
17 of \$4,741,000;

18 Muskegon Harbor, Michigan: House Document Num-  
19 bered 474, Eighty-seventh Congress, at an estimated cost of  
20 \$609,000;

21 Leland Harbor, Michigan: House Document Numbered  
22 413, Eighty-seventh Congress, at an estimated cost of \$485,-  
23 000;

24 Little Bay De Noc, Gladstone Harbor and Kipling,  
25 Michigan: House Document Numbered 480, Eighty-seventh



- 1 Congress, at an estimated cost of \$350,000;
- 2 Green Bay Harbor, Wisconsin: House Document Num-  
3 bered 470, Eighty-seventh Congress, at an estimated cost of  
4 \$4,270,000;
- 5 Kenosha Harbor, Wisconsin: House Document Num-  
6 bered 496, Eighty-seventh Congress, at an estimated cost  
7 of \$673,000;
- 8 Manitowoc Harbor, Wisconsin: House Document Num-  
9 bered 479, Eighty-seventh Congress, at an estimated cost  
10 of \$719,000;
- 11 Milwaukee Harbor, Wisconsin: House Document Num-  
12 bered 134, Eighty-seventh Congress, at an estimated cost  
13 of \$4,029,000;
- 14 Calumet Harbor and River, Illinois and Indiana: House  
15 Document Numbered —, Eighty-seventh Congress, at an  
16 estimated cost of \$11,464,000;
- 17 Chicago Harbor, Illinois: House Document Numbered  
18 485, Eighty-seventh Congress, at an estimated cost of  
19 \$1,505,000;
- 20 New Buffalo Harbor, Michigan: House Document Num-  
21 bered 481, Eighty-seventh Congress, at an estimated cost  
22 of \$667,000;
- 23 Caseville Harbor, Michigan: House Document Num-  
24 bered 64, Eighty-seventh Congress, at an estimated cost of  
25 \$327,000;

1        Saginaw River, Michigan: House Document Numbered  
2    544, Eighty-seventh Congress, at an estimated cost of  
3    \$4,780,000;

4        Rouge River, Michigan: House Document Numbered  
5    509, Eighty-seventh Congress, at an estimated cost of  
6    \$257,000;

7        Huron Harbor, Ohio: House Document Numbered 165,  
8    Eighty-seventh Congress, at an estimated cost of \$8,557,000;

9        Cleveland Harbor, Ohio: House Document Numbered  
10   527, Eighty-seventh Congress, at an estimated cost of  
11   \$888,000;

12        Conneaut Harbor, Ohio: House Document Numbered  
13   415, Eighty-seventh Congress, at an estimated cost of  
14   \$6,179,000;

15        Erie Harbor, Pennsylvania: House Document Num-  
16   bered 340, Eighty-seventh Congress, at an estimated cost  
17   of \$671,000;

18        Buffalo Harbor, New York: House Document Num-  
19   bered 451, Eighty-seventh Congress, at an estimated cost  
20   of \$2,797,000;

21        Great Sodus Bay Harbor, New York: House Document  
22   Numbered 138, Eighty-seventh Congress, at an estimated  
23   cost of \$765,000;

24        Oswego Harbor, New York: House Document Num-

bered 471, Eighty-seventh Congress, at an estimated cost of \$1,180,000;

Dana Point Harbor, California: House Document Numbered 532, Eighty-seventh Congress, at an estimated cost of \$3,730,000;

Santa Barbara Harbor, California: House Document Numbered 518, Eighty-seventh Congress, at an estimated cost of \$3,000,000;

Oakland Harbor, California, Fruitvale Avenue Bridge: Senate Document Numbered 75, Eighty-seventh Congress, at an estimated cost of \$1,750,000;

Oakland Harbor, California: House Document Numbered 353, Eighty-seventh Congress, at an estimated cost of \$6,775,000;

Noyo River and Harbor, California: Senate Document Numbered 121, Eighty-seventh Congress, at an estimated cost of \$13,231,000;

Columbia and Lower Willamette Rivers, Oregon and Washington: House Document Numbered 203, Eighty-seventh Congress, at an estimated cost of \$493,000;

Columbia and Lower Willamette Rivers below Vancouver, Washington, and Portland, Oregon: House Document Numbered 452, Eighty-seventh Congress, at an estimated cost of \$20,100,000;

Tacoma Harbor, Port Industrial and Hylebos Water-



1 ways, Washington: Senate Document Numbered 104,  
2 Eighty-seventh Congress, at an estimated cost of \$2,460,000;

3 Kingston Harbor, Washington: House Document Num-  
4 bered 417, Eighty-seventh Congress, at an estimated cost  
5 of \$428,000;

6 Swinomish Channel, Washington: House Document  
7 Numbered 499, Eighty-seventh Congress, at an estimated  
8 cost of \$887,000;

9 Kaunakakai Harbor, Molokai, Hawaii: House Docu-  
10 ment Numbered 484, Eighty-seventh Congress, at an esti-  
11 mated cost of \$7,919,000;

12 BEACH EROSION

13 State of New Hampshire: House Document Numbered  
14 416, Eighty-seventh Congress, at an estimated cost of  
15 \$88,000;

16 Fire Island Inlet and shore westerly to Jones Inlet,  
17 Long Island, New York: Modification of the existing beach  
18 erosion control project authorized by the River and Harbor  
19 Act of 1958 (Public Law 500, Eighty-fifth Congress),  
20 House Document Numbered 411, Eighty-fifth Congress, is  
21 hereby authorized substantially in accordance with the plans,  
22 which will include a sand bypassing system at Fire Island  
23 Inlet, being prepared by the Chief of Engineers;

24 Virginia Beach, Virginia: House Document Numbered  
25 382, Eighty-seventh Congress, periodic nourishment;

1 Fort Macon, Atlantic Beach and vicinity, North Caro-  
2 lina: House Document Numbered 555, Eighty-seventh Con-  
3 gress, at an estimated cost of \$194,000;

4 Virginia Key and Key Biscayne, Florida: House Docu-  
5 ment Numbered 561, Eighty-seventh Congress, at an esti-  
6 mated cost of \$220,000;

7 Lake Erie shoreline from the Michigan-Ohio State line  
8 to Marblehead, Ohio: House Document Numbered 63.  
9 Eighty-seventh Congress, at an estimated cost of \$658,500;

10 Sheffield Lake Community Park, Sheffield Lake Village,  
11 Ohio: House Document Numbered 414, Eighty-seventh  
12 Congress, at an estimated cost of \$100,300;

13 Ventura-Pierpont Area, California: House Document  
14 Numbered 458, Eighty-seventh Congress, at an estimated  
15 cost of \$515,000.

16 SEC. 102. The Secretary of the Army is authorized to  
17 convey 17.94 acres of land located at old lock and dam  
18 numbered 7, Ohio River, to the city of Midland, Pennsylv-  
19 ania, after November 1, 1962, for public park and recrea-  
20 tion purposes, without monetary consideration but subject  
21 to reversion to the United States if not utilized for public  
22 park and recreation purposes and further subject to such  
23 flowage rights as may be necessary in the operation of the  
24 New Cumberland lock and dam, Ohio River.

25 SEC. 103. That the Secretary of the Army is hereby



1 authorized to reimburse local interests for such work done  
2 by them on the beach erosion projects authorized in section  
3 101, and in other sections of this Act, subsequent to the  
4 initiation of the cooperative studies which form the basis for  
5 the projects: *Provided*, That the work which may have been  
6 done on these projects is approved by the Chief of Engi-  
7 neers as being in accordance with the projects herein  
8 adopted: *Provided further*, That such reimbursement shall  
9 be subject to appropriations applicable thereto or funds  
10 available therefor and shall not take precedence over other  
11 pending projects of higher priority for improvements.

12 SEC. 104. The Secretary of the Army is hereby author-  
13 ized and directed to cause surveys to be made at the follow-  
14 ing named localities and subject to all applicable provisions of  
15 section 10 of the River and Harbor Act of 1950:

16 A channel between Point Shirley and Deer Island,  
17 Massachusetts, at approximately the same location as the  
18 former channel commonly known as Shirley Gut.

19 Kings Bay Channel, Georgia.

20 Auglaize River in Wapakoneta, Auglaize County,  
21 Ohio.

22 SEC. 105. Title I of this Act may be cited as the "River  
23 and Harbor Act of 1962".

## 24 TITLE II—FLOOD CONTROL

25 SEC. 201. That section 3 of the Act approved June

1 22, 1936 (Public Law Numbered 738, Seventy-fourth Con-  
2 gress), as amended by section 2 of the Act approved June  
3 28, 1938 (Public Law Numbered 761, Seventy-fifth Con-  
4 gress), shall apply to all works authorized in this title except  
5 that for any channel improvement or channel rectification  
6 project, provisions (a), (b), and (c) of section 3 of said  
7 Act of June 22, 1936, shall apply thereto, and except as  
8 otherwise provided by law: *Provided*, That the authoriza-  
9 tion for any flood control project herein adopted requiring  
10 local cooperation shall expire five years from the date on  
11 which local interests are notified in writing by the Depart-  
12 ment of the Army of the requirements of local cooperation,  
13 unless said interests shall within said time furnish assur-  
14 ances satisfactory to the Secretary of the Army that the  
15 required cooperation will be furnished.

16 SEC. 202. The provisions of section 1 of the Act of  
17 December 22, 1944 (Public Law Numbered 534, Seventy-  
18 eighth Congress, second session), shall govern with respect  
19 to projects authorized in this Act, and the procedures therein  
20 set forth with respect to plans, proposals, or reports for  
21 works of improvement for navigation or flood control and  
22 for irrigation and purposes incidental thereto shall apply as  
23 if herein set forth in full.

24 SEC. 203. The following works of improvement for the  
25 benefit of navigation and the control of destructive flood-

1 waters and other purposes are hereby adopted and author-  
2 ized to be prosecuted under the direction of the Secretary  
3 of the Army and the supervision of the Chief of Engineers  
4 in accordance with the plans in the respective reports here-  
5 inafter designated and subject to the conditions set forth  
6 therein: *Provided*, That the necessary plans, specifications,  
7 and preliminary work may be prosecuted on any project  
8 authorized in this title with funds from appropriations here-  
9 tofore or hereafter made for flood control so as to be ready  
10 for rapid inauguration of a construction program: *Provided*  
11 *further*, That the projects authorized herein shall be initiated  
12 as expeditiously and prosecuted as vigorously as may be con-  
13 sistent with budgetary requirements: *And provided further*,  
14 That penstocks and other similar facilities adapted to pos-  
15 sible future use in the development of hydroelectric power  
16 shall be installed in any dam authorized in this Act for con-  
17 struction by the Department of the Army when approved  
18 by the Secretary of the Army on the recommendation of the  
19 Chief of Engineers and the Federal Power Commission.

20 NEW ENGLAND-ATLANTIC COASTAL AREA

21 The project for navigation and hurricane-flood protection  
22 at Wareham-Marion, Massachusetts, is hereby authorized  
23 substantially in accordance with the recommendation of the  
24 Chief of Engineers in House Document Numbered 548,  
25 Eighty-seventh Congress, at an estimated cost of \$3,811,500.



1       The project for navigation and hurricane flood protection  
2 at Point Judith, Rhode Island, is hereby authorized substan-  
3 tially in accordance with the recommendations of the Chief  
4 of Engineers in House Document Numbered 521, Eighty-  
5 seventh Congress, at an estimated cost of \$2,414,000.

6       The project for navigation and hurricane-flood control  
7 protection at Narragansett Pier, Rhode Island, is hereby  
8 authorized substantially in accordance with the recommenda-  
9 tions of the Chief of Engineers in House Document Num-  
10 bered 195, Eighty-seventh Congress, at an estimated cost of  
11 \$1,152,000.

12                               LONG ISLAND SOUND AREA

13       The project for hurricane-flood control protection at New  
14 London, Connecticut, is hereby authorized substantially in  
15 accordance with the recommendations of the Chief of Engi-  
16 neers in House Document Numbered 478, Eighty-seventh  
17 Congress, at an estimated cost of \$2,401,000.

18       The project for hurricane-flood protection at Westport,  
19 Connecticut, is hereby authorized substantially in accordance  
20 with the recommendations of the Chief of Engineers in House  
21 Document Numbered 412, Eighty-seventh Congress, at an  
22 estimated cost of \$217,000.

23       The project for hurricane-flood protection at Mystic,  
24 Connecticut, is hereby authorized substantially in accordance  
25 with the recommendations of the Chief of Engineers in House

1 Document Numbered 411, Eighty-seventh Congress, at an  
2 estimated cost of \$1,490,000.

3 HOUSATONIC RIVER BASIN

4 The project for flood protection on the Naugatuck River  
5 at Ansonia-Derby, Connecticut, is hereby authorized sub-  
6 stantially in accordance with the recommendations of the  
7 Chief of Engineers in House Document Numbered 437,  
8 Eighty-seventh Congress, at an estimated cost of \$5,620,000.

9 HUDSON RIVER BASIN

10 The project for flood protection on Rondout Creek and  
11 Wallkill River and their tributaries, New York and New  
12 Jersey, is hereby authorized substantially in accordance with  
13 the recommendations of the Chief of Engineers in Senate  
14 Document Numbered 113, Eighty-seventh Congress, at an  
15 estimated cost of \$5,111,000.

16 NEW JERSEY—ATLANTIC COASTAL AREA

17 The project for hurricane-flood protection and beach  
18 erosion control on Raritan Bay and Sandy Hook Bay, New  
19 Jersey, is hereby authorized substantially in accordance with  
20 the recommendations of the Chief of Engineers in House  
21 Document Numbered 464, Eighty-seventh Congress, at an  
22 estimated cost of \$3,097,000.

23 SUSQUEHANNA RIVER BASIN

24 The project for the Juniata River and tributaries,  
25 Pennsylvania, is hereby authorized in accordance with the

1 recommendations of the Chief of Engineers in House Docu-  
2 ment Numbered 565, Eighty-seventh Congress, but without  
3 the power features, at an estimated cost of \$32,150,000:  
4 *Provided*, That if the Chief of Engineers deems it desirable  
5 he may submit a reexamination report on the power gener-  
6 ating features to the Congress for its consideration.

7  
8 DELAWARE RIVER BASIN

8 The project for the comprehensive development of the  
9 Delaware River Basin, New York, New Jersey, Pennsyl-  
10 vania, and Delaware, is hereby authorized substantially in  
11 accordance with the recommendations of the Chief of Engi-  
12 neers, in House Document Numbered 522, Eighty-seventh  
13 Congress, at an estimated cost of \$224,000,000.

14  
15 POTOMAC RIVER BASIN

15 The project for the North Branch of the Potomac River,  
16 Maryland and West Virginia, is hereby authorized substan-  
17 tially in accordance with the recommendations of the Chief of  
18 Engineers, in House Document Numbered 469, Eighty-  
19 seventh Congress, at an estimated cost of \$50,965,000.

20  
21 MIDDLE ATLANTIC COASTAL AREA

21 The project for hurricane-flood protection at Norfolk,  
22 Virginia, is hereby authorized substantially in accordance  
23 with the recommendations of the Chief of Engineers in House  
24 Document Numbered 354, Eighty-seventh Congress, at an  
25 estimated cost of \$1,537,000.



1       The project for hurricane-flood protection and beach  
2 erosion control at Carolina Beach and vicinity, North Caro-  
3 lina, is hereby authorized substantially in accordance with  
4 the recommendations of the Chief of Engineers in House  
5 Document Numbered 418, Eighty-seventh Congress, at an  
6 estimated cost of \$739,000.

7                   APALACHICOLA RIVER BASIN, GEORGIA

8       The project for the West Point Reservoir, Chattahoo-  
9 chee River, Georgia, is hereby authorized substantially in ac-  
10 cordance with the recommendations of the Secretary of the  
11 Army and the Chief of Engineers in House Document Num-  
12 bered 570, Eighty-seventh Congress, at an estimated cost of  
13 \$52,900,000.

14                   CENTRAL AND SOUTHERN FLORIDA

15       The comprehensive plan for flood control and other  
16 purposes in central and southern Florida, approved in the  
17 Act of June 30, 1948, and subsequent Acts of Congress is  
18 hereby modified to include the following items:

19       The project for south Dade County, Florida, is hereby  
20 authorized substantially in accordance with the recommenda-  
21 tions of the Secretary of the Army and the Chief of Engineers  
22 in Senate Document Numbered 138, Eighty-seventh Con-  
23 gress, at an estimated cost of \$13,388,000;

24       The project for flood protection in the Cutler Drain  
25 Area, Florida, is hereby authorized substantially in accord-

1   ance with the recommendations of the Chief of Engineers in  
2   Senate Document Numbered 123, Eighty-seventh Congress,  
3   at an estimated cost of \$2,063,000.

4                   GREEN SWAMP REGION, FLORIDA

5       The project for the four river basins, Florida, namely  
6   the Hillsborough, Oklawaha, Withlacoochee, and Peace  
7   Rivers, is hereby authorized substantially in accordance with  
8   the recommendations of the Chief of Engineers in House  
9   Document Numbered 585, Eighty-seventh Congress, at an  
10  estimated cost of \$57,760,000.

11                   PASCAGOULA RIVER BASIN

12       The project for flood protection on the Chunky Creek,  
13   Chickasawhay and Pascagoula Rivers, Mississippi, is hereby  
14   authorized substantially in accordance with the recommenda-  
15   tions of the Chief of Engineers in House Document Num-  
16   bered 549, Eighty-seventh Congress, at an estimated cost of  
17   \$6,740,000.

18                   LOWER MISSISSIPPI RIVER BASIN

19       The project for flood control and improvement of the  
20   lower Mississippi River, adopted by the Act of May 15,  
21   1928, as amended, is hereby modified and expanded to in-  
22   clude construction of certain improvements in Gin and Muddy  
23   Bayous, Yazoo River Basin, Mississippi, substantially in  
24   accordance with plans on file in the Office, Chief of Engi-  
25   neers, at an estimated cost of \$150,000.

1       The project for hurricane-flood protection on the Missis-  
2       sippi River Delta at and below New Orleans, Louisiana, is  
3       hereby authorized substantially in accordance with the rec-  
4       ommendations of the Chief of Engineers in House Docu-  
5       ment Numbered 550, Eighty-seventh Congress, at an esti-  
6       mated cost of \$7,502,000.

7       The project for flood protection on Red River in  
8       Natchitoches and Red River Parishes, Louisiana, is hereby  
9       authorized substantially in accordance with the recommenda-  
10      tions of the Chief of Engineers in House Document Num-  
11      bered 476, Eighty-seventh Congress, at an estimated cost  
12      of \$1,293,000.

13      The lower auxiliary channel, Yazoo River Basin, Mis-  
14      sissippi, a unit in the Mississippi River and tributaries  
15      project, shall hereafter be known and designated as the Will  
16      M. Whittington Auxiliary Channel in honor of the late Mem-  
17      ber of the House of Representatives from the Third District  
18      of Mississippi, and former chairman of the House Public  
19      Works Committee. The Secretary of the Army, acting  
20      through the Chief of Engineers, United States Army, is  
21      hereby authorized and directed to erect appropriate markers  
22      along the auxiliary channel designating the project "The  
23      Will M. Whittington Auxiliary Channel". Any law, regula-  
24      tion, document, or record of the United States in which such  
25      project is designated or referred to under the name of lower



1 auxiliary channel, Yazoo River Basin, Mississippi, shall be  
2 held and considered to refer to such project by the name of  
3 "Will M. Whittington Auxiliary Channel".

4 BUFFALO BAYOU

5 The project for flood protection on Vince and Little  
6 Vince Bayous, Texas, is hereby authorized substantially as  
7 recommended by the Chief of Engineers in House Document  
8 Numbered 441, Eighty-seventh Congress, at an estimated  
9 cost of \$2,224,000.

10 GULF OF MEXICO

11 The project for hurricane-flood protection at Port Arthur  
12 and vicinity, Texas, is hereby authorized substantially in  
13 accordance with the recommendations of the Chief of Engi-  
14 neers in House Document Numbered 505, Eighty-seventh  
15 Congress, at an estimated cost of \$23,380,000.

16 The project for hurricane-flood protection at Freeport  
17 and vicinity, Texas, is hereby authorized substantially in  
18 accordance with the recommendations of the Chief of Engi-  
19 neers in House Document Numbered 495, Eighty-seventh  
20 Congress, at an estimated cost of \$3,780,000.

21 TRINITY RIVER BASIN

22 The project for flood protection on the East Fork of  
23 the Trinity River, Texas, is hereby authorized substantially  
24 in accordance with the recommendations of the Chief of  
25 Engineers in House Document Numbered 554, Eighty-



1 seventh Congress, at an estimated cost of \$23,760,000.

2 The project for extension of the Fort Worth Floodway,  
3 Texas, is hereby authorized substantially as recommended  
4 by the Chief of Engineers in House Document Numbered  
5 454, Eighty-seventh Congress, at an estimated cost of  
6 \$5,148,000.

7 BRAZOS RIVER BASIN

8 The comprehensive plan for the Brazos River Basin,  
9 authorized by the Act of September 3, 1954, as amended  
10 by subsequent Acts of Congress, is hereby further modified to  
11 include the following item, and the monetary authorization  
12 for said comprehensive plan is hereby increased accordingly.

13 The project for the San Gabriel River, Texas, is  
14 hereby authorized substantially in accordance with the  
15 recommendations of the Chief of Engineers in House  
16 Document Numbered —, Eighty-seventh Congress, at  
17 an estimated cost of \$20,250,000.

18 The project for flood protection on the Clear Fork of  
19 the Brazos River at and in the vicinity of Abilene, Texas, is  
20 hereby authorized substantially as recommended by the Chief  
21 of Engineers in House Document Numbered 506, Eighty-  
22 seventh Congress, at an estimated cost of \$31,200,000.

23 TULAROSA BASIN

24 The project for flood protection at Alamogordo, New  
25 Mexico, is hereby authorized substantially in accordance with

1 the recommendations of the Chief of Engineers in House  
2 Document Numbered 473, Eighty-seventh Congress, at an  
3 estimated cost of \$2,040,000.

4 RIO GRANDE BASIN

5 The project for flood protection at Las Cruces, New  
6 Mexico, is hereby authorized substantially as recommended  
7 by the Chief of Engineers in Senate Document Numbered  
8 117, Eighty-seventh Congress, at an estimated cost of  
9 \$3,350,000.

10 ARKANSAS RIVER BASIN

11 The Dardanelle lock and dam, Arkansas River, Ar-  
12 kansas, is hereby modified to provide for construction of a  
13 sewage outfall for the city of Russellville, Arkansas, substan-  
14 tially in accordance with plans of said city, approved by the  
15 Chief of Engineers, at an estimated cost of \$1,400,000.

16 The project for flood protection on Cow Creek, Kansas,  
17 is hereby authorized substantially in accordance with the  
18 recommendations of the Chief of Engineers in House Docu-  
19 ment Numbered 531, Eighty-seventh Congress, at an esti-  
20 mated cost of \$1,560,000.

21 The project for flood protection on the Arkansas River  
22 at Dodge City, Kansas, is hereby authorized substantially  
23 in accordance with the recommendations of the Chief of  
24 Engineers, in House Document Numbered 498, Eighty-  
25 seventh Congress, at an estimated cost of \$2,133,000.

1       The project for improvement of the Verdigris River and  
2       tributaries, Oklahoma and Kansas, is hereby authorized sub-  
3       stantially in accordance with the recommendations of the  
4       Chief of Engineers in House Document Numbered 563,  
5       Eighty-seventh Congress, at an estimated cost of  
6       \$62,400,000.

7       The project for the Kaw Reservoir, Arkansas River,  
8       Oklahoma, is hereby authorized substantially in accordance  
9       with the recommendations of the Chief of Engineers in  
10      Senate Document Numbered 143, Eighty-seventh Congress,  
11      at an estimated cost of \$83,230,000.

#### 12                   WHITE RIVER BASIN

13      The project for flood protection on Village Creek, White  
14      River, and Mayberry Levee Districts, Arkansas, is hereby  
15      modified to provide for construction of a pumping plant, sub-  
16      stantially as recommended by the Chief of Engineers in  
17      House Document Numbered 577, Eighty-seventh Congress,  
18      at an estimated cost of \$1,018,000.

19      The flood protection project for Village Creek, Jackson  
20      and Lawrence Counties, Arkansas, is hereby authorized sub-  
21      stantially as recommended by the Chief of Engineers in  
22      House Document Numbered 352, Eighty-seventh Congress,  
23      at an estimated cost of \$1,968,000.

#### 24                   RED RIVER BASIN

25      The project for Lake Kemp, Wichita River, Texas, is



1 hereby authorized substantially in accordance with the recom-  
2 mendations of the Chief of Engineers in Senate Document  
3 Numbered 144, Eighty-seventh Congress, at an estimated  
4 cost of \$6,410,000.

5 The project providing for the construction of two ex-  
6 perimental water quality study projects in the Arkansas-  
7 Red River Basins, is hereby authorized substantially in  
8 accordance with the recommendations of the Chief of Engi-  
9 neers in Senate Document Numbered 105, Eighty-seventh  
10 Congress, at an estimated cost of \$300,000.

11 The modification of the Broken Bow Reservoir, Moun-  
12 tain Fork River, Oklahoma, is hereby authorized substan-  
13 tially in accordance with the recommendations of the Chief of  
14 Engineers in Senate Document Numbered 137, Eighty-  
15 seventh Congress, at an estimated cost of \$23,800,000.

16 The project for the Clayton and Tuskahoma Reservoirs,  
17 Kiamichi River, Oklahoma, is hereby authorized substan-  
18 tially in accordance with the recommendations of the Chief of  
19 Engineers in Senate Document Numbered 145, Eighty-  
20 seventh Congress, at an estimated cost of \$29,748,000.

21 MISSOURI RIVER BASIN

22 The comprehensive plan for the Missouri River Basin,  
23 approved in the Act of June 28, 1938, as amended by  
24 subsequent Acts of Congress, is hereby further modified to  
25 include the following project, and the monetary authori-

1 zation for said general comprehensive plan is increased  
2 accordingly.

3 (a) The Kaysinger Bluff Reservoir, Osage River,  
4 Missouri, is hereby modified substantially in accordance with  
5 the recommendations of the Chief of Engineers in House  
6 Document Numbered —, Eighty-seventh Congress, at an  
7 estimated additional cost of \$43,245,000: *Provided*, That  
8 nothing in this act shall be construed as authorizing the  
9 acquisition of additional lands for the establishment of a na-  
10 tional wildlife refuge at the reservoir.

11 (b) The project for the Kansas River, Kansas, Ne-  
12 braska, and Colorado, is hereby authorized substantially in  
13 accordance with the recommendations of the Secretary of the  
14 Army and the Chief of Engineers in Senate Document Num-  
15 bered 122, Eighty-seventh Congress, at an estimated cost  
16 of \$88,070,000: *Provided*, That the authorization for the  
17 Woodbine Reservoir on Lyon Creek is deferred at this time,  
18 subject to submission of a new feasibility report by the  
19 Chief of Engineers to the Eighty-eighth Congress, which  
20 shall take into account the water and related land resource  
21 development plans of the Soil Conservation Service, the  
22 Kansas Water Resources Board, and Lyon Creek Water-  
23 shed Joint District Numbered 41, and preparation of said  
24 report is hereby authorized.

25 The project for flood protection on Papillion Creek and

1 tributaries, Nebraska, is hereby authorized substantially in  
2 accordance with the recommendations of the Chief of Engi-  
3 neers in House Document Numbered 475, Eighty-seventh  
4 Congress, at an estimated cost of \$2,122,000.

5 The project for flood protection on Indian Creek, Iowa,  
6 is hereby authorized substantially in accordance with the  
7 recommendations of the Chief of Engineers in House Docu-  
8 ment Numbered 438, Eighty-seventh Congress, at an esti-  
9 mated cost of \$1,270,000.

10

## OHIO RIVER BASIN

11 The project for flood protection on the Kokosing River,  
12 Ohio, is hereby authorized substantially as recommended by  
13 the Chief of Engineers in House Document Numbered 220,  
14 Eighty-seventh Congress, at an estimated cost of \$2,438,000.

15 The project for flood protection on the Mad River above  
16 Huffman Dam, Ohio, is hereby authorized substantially in  
17 accordance with the recommendations of the Chief of Engi-  
18 neers in House Document Numbered 439, Eighty-seventh  
19 Congress, at an estimated cost of \$7,930,000.

20 The project for the Kentucky River, Kentucky, is here-  
21 by authorized substantially in accordance with the recom-  
22 mendations of the Chief of Engineers, in House Document  
23 Numbered 423, Eighty-seventh Congress, at an estimated  
24 cost of \$26,020,000.

25 The project for flood protection on the Buckhannon



1 River, West Virginia, is hereby authorized substantially in  
2 accordance with the recommendations of the Chief of Engi-  
3 neers in Senate Document Numbered 43, Eighty-seventh  
4 Congress, at an estimated cost of \$1,206,000.

5 The project for the Guyandot River and tributaries,  
6 West Virginia, is hereby authorized substantially in accord-  
7 ance with the recommendations of the Chief of Engineers in  
8 House Document Numbered 569, Eighty-seventh Congress,  
9 second session, at an estimated cost of \$60,477,000.

10 The project for Twelvepole Creek, West Virginia, is  
11 hereby authorized substantially in accordance with the rec-  
12 ommendations of the Chief of Engineers, in House Document  
13 Numbered 520, Eighty-seventh Congress, at an estimated  
14 cost of \$11,000,000.

15 The project for flood protection on Crab Creek at  
16 Youngstown, Ohio, is hereby authorized substantially in  
17 accordance with the recommendations of the Chief of Engi-  
18 neers in House Document Numbered 440, Eighty-seventh  
19 Congress, at an estimated cost of \$2,268,000.

20 The project for the Scioto River, Ohio, is hereby author-  
21 ized substantially in accordance with the recommendations of  
22 the Chief of Engineers in House Document Numbered —,   
23 Eighty-seventh Congress, at an estimated cost of  
24 \$55,847,000.

25 The project for flood protection on the Allegheny River

1 at Salamanca, New York, is hereby authorized substantially  
2 in accordance with the recommendations of the Chief of  
3 Engineers in House Document Numbered 166, Eighty-  
4 seventh Congress, at an estimated cost of \$1,390,000.

5 The project for French Creek, Pennsylvania, is hereby  
6 authorized substantially in accordance with the recommenda-  
7 tions of the Chief of Engineers in Senate Document Num-  
8 bered 95, Eighty-seventh Congress, at an estimated cost of  
9 \$23,102,000.

10 The project for the Saline River and tributaries, Illinois,  
11 authorized by the Flood Control Act of 1958 (Public Law  
12 85-500), is hereby modified to provide that no cash con-  
13 tribution shall be required of local interests: *Provided*, That  
14 the other items of local cooperation recommended by the  
15 Chief of Engineers in House Document Numbered 316 of  
16 the Eighty-fourth Congress shall still be applicable.

17 UPPER MISSISSIPPI RIVER BASIN

18 The project for the Illinois River and tributaries, Illinois,  
19 Wisconsin, and Indiana, is hereby authorized substantially as  
20 recommended by the Chief of Engineers in House Document  
21 Numbered 472, Eighty-seventh Congress, at an estimated  
22 cost of \$71,465,000.

23 The project for Rend Lake, Illinois, is hereby authorized  
24 substantially in accordance with the recommendations of the  
25 Chief of Engineers in House Document Numbered 541,

1 Eighty-seventh Congress, at an estimated cost of \$35,500,000.

2 The project for flood protection on the Mississippi River  
3 at and in the vicinity of Guttenberg, Iowa, is hereby author-  
4 ized substantially in accordance with the recommendations  
5 of the Chief of Engineers in House Document Numbered  
6 286, Eighty-seventh Congress, at an estimated cost of  
7 \$729,000.

8 The project for flood protection on the Mississippi River  
9 between Sainte Genevieve and Saint Marys, Missouri, is  
10 hereby authorized substantially in accordance with the rec-  
11 ommendations of the Chief of Engineers in House Document  
12 Numbered 519, Eighty-seventh Congress, at an estimated  
13 cost of \$2,500,000.

14 The project for the Harrisonville and Ivy Landing  
15 Drainage and Levee District Number 2, Illinois, is hereby  
16 authorized substantially in accordance with the recommenda-  
17 tions of the Chief of Engineers in House Document Num-  
18 bered 542, Eighty-seventh Congress, at an estimated cost  
19 of \$1,112,000.

20 The project for the Columbia Drainage and Levee Dis-  
21 trict Number 3, Illinois, is hereby authorized substantially in  
22 accordance with the recommendations of the Chief of Engi-  
23 neers in House Document Numbered 543, Eighty-seventh  
24 Congress, at an estimated cost of \$986,000.

25 The project for the Prairie DuPont Levee and Sanitary



1 District, Illinois, is hereby authorized substantially in ac-  
2 cordance with the recommendations of the Chief of Engineers  
3 in House Document Numbered 540, Eighty-seventh Con-  
4 gress, at an estimated cost of \$921,000.

5 The project for flood protection on Richland Creek,  
6 Illinois, is hereby authorized substantially in accordance with  
7 the recommendations of the Chief of Engineers in House  
8 Document Numbered 571, Eighty-seventh Congress, at an  
9 estimated cost of \$4,995,000.

10 The project for the Joanna Reservoir, Salt River,  
11 Missouri, is hereby authorized substantially in accordance  
12 with the recommendations of the Chief of Engineers in House  
13 Document Numbered 507, Eighty-seventh Congress, at an  
14 estimated cost of \$63,300,000.

15 The project for flood protection on the Pecatonica River,  
16 Illinois and Wisconsin, is hereby authorized substantially in  
17 accordance with the recommendations of the Chief of Engi-  
18 neers in House Document Numbered 539, Eighty-seventh  
19 Congress, at an estimated cost of \$850,000.

20 The project for the Mississippi River Urban Areas from  
21 Hampton, Illinois, to Cassville, Wisconsin, is hereby author-  
22 ized substantially in accordance with the recommendations  
23 of the Chief of Engineers in House Document Numbered 450,  
24 Eighty-seventh Congress, at an estimated cost of \$5,350,000.

25 The project for the Kickapoo River, Wisconsin, is hereby

1 authorized substantially as recommended by the Chief of  
2 Engineers in House Document Numbered 557, Eighty-  
3 seventh Congress, at an estimated cost of \$15,570,000.

4 The project for flood protection on the Warroad River  
5 and Bull Dog Creek, Minnesota, is hereby authorized sub-  
6 stantially in accordance with the recommendations of the  
7 Chief of Engineers in House Document Numbered 449,  
8 Eighty-seventh Congress, at an estimated cost of \$972,000.

9 GREAT LAKES BASIN

10 The project for flood protection on the River Rouge,  
11 Michigan, is hereby authorized substantially in accordance  
12 with the recommendations of the Chief of Engineers in House  
13 Document Numbered 148, Eighty-seventh Congress, at an  
14 estimated cost of \$8,659,000.

15 The project for flood protection on the Sandusky River,  
16 Ohio, is hereby authorized substantially in accordance with  
17 the recommendations of the Chief of Engineers in Senate  
18 Document Numbered 136, Eighty-seventh Congress, at an  
19 estimated cost of \$4,300,000.

20 TRUCKEE RIVER BASIN

21 The project for flood protection on the Truckee River  
22 and tributaries, California and Nevada, is hereby authorized  
23 substantially in accordance with the recommendations of the  
24 Chief of Engineers in House Document Numbered 435,  
25 Eighty-seventh Congress, at an estimated cost of \$2,385,000.

## 1                                    SAN FRANCISCO BAY AREA

2            The project for flood protection on Alameda Creek, Cali-  
3    fornia, is hereby authorized substantially in accordance with  
4    the recommendations of the Chief of Engineers in Senate  
5    Document Numbered 128, Eighty-seventh Congress, at an  
6    estimated cost of \$14,680,000.

7            The project for Corte Madera Creek, Marin County,  
8    California, is hereby authorized substantially in accordance  
9    with the recommendations of the Secretary of the Army and  
10   the Chief of Engineers in House Document Numbered 545,  
11   Eighty-seventh Congress, at an estimated cost of \$5,534,000.

## 12                                    SAN JOAQUIN RIVER BASIN

13           The New Melones project, Stanislaus River, California,  
14   authorized by the Flood Control Act approved December  
15   22, 1944 (58 Stat. 887), is hereby modified substantially  
16   in accordance with the recommendations of the Chief of  
17   Engineers in House Document Numbered 453, Eighty-  
18   seventh Congress, at an estimated cost of \$113,717,000:  
19   *Provided*, That upon completion of construction of the dam  
20   and powerplant by the Corps of Engineers, the project shall  
21   become an integral part of the Central Valley project and  
22   be operated and maintained by the Secretary of the Interior  
23   pursuant to the Federal reclamation laws, except that the  
24   flood control operation of the project shall be in accordance  
25   with the rules and regulations prescribed by the Secretary



1 of the Army: *Provided further*, That the Stanislaus River  
2 Channel, from Goodwin Dam to the San Joaquin River,  
3 shall be maintained by the Secretary of the Army to a  
4 capacity of at least five thousand cubic feet per second  
5 subject to the condition that responsible local interests agree  
6 to maintain private levees and to prevent encroachment on  
7 the existing channel and floodway between the levees:  
8 *Provided further*, That before initiating any diversions of  
9 water from the Stanislaus River Basin in connection with  
10 the operation of the Central Valley project, the Secretary  
11 of the Interior shall determine the quantity of water required  
12 to satisfy all existing and anticipated future needs within  
13 that basin and the diversions shall at all times be sub-  
14 ordinate to the quantities so determined: *Provided further*,  
15 That the Secretary of the Army adopt appropriate measures  
16 to insure the preservation and propagation of fish and wild-  
17 life in the New Melones project and shall allocate to the  
18 preservation and propagation of fish and wildlife, as pro-  
19 vided in the Act of August 14, 1946 (60 Stat. 1080), an  
20 appropriate share of the cost of constructing the Stanislaus  
21 River division and of operating and maintaining the same,  
22 such costs to be nonreimbursable: *Provided further*, That  
23 the Secretary of the Army, in connection with the New  
24 Melones project, construct basic public recreation facilities,  
25 acquire land necessary for that purpose, the cost of con-

1 structing such facilities and acquiring such lands to be non-  
2 reimbursable and nonreturnable: *Provided further*, That  
3 contracts for the sale and delivery of the additional electric  
4 energy available from the Central Valley project power  
5 system as a result of the construction of the plants herein  
6 authorized and their integration with that system shall be  
7 made in accordance with preferences expressed in the Federal  
8 reclamation laws except that a first preference, to the extent  
9 of 25 per centum of such additional energy, shall be given,  
10 under reclamation law, to preference customers in Tuolumne  
11 and Calaveras Counties, California, for use in that county,  
12 who are ready, able, and willing, within twelve months  
13 after notice of availability by the Secretary of the Interior,  
14 to enter into contracts for the energy and that Tuolumne  
15 and Calaveras County preference customers may exercise  
16 their option in the same date in each successive fifth year  
17 providing written notice of their intention to use the energy  
18 is given to the Secretary not less than eighteen months prior  
19 to said dates: *And provided further*, That the Secretary of  
20 the Army give consideration **during** the preconstruction  
21 planning for the New Melones project to the advisability  
22 of including storage for the regulation of streamflow for the  
23 purpose of downstream water quality control.

24 The Hidden Reservoir, Fresno River, California, is  
25 hereby authorized substantially in accordance with the recom-

1   mendations of the Chief of Engineers in Senate Document  
2   Numbered 37, Eighty-seventh Congress, at an estimated cost  
3   of \$14,338,000.

4       The Buchanan Reservoir, Chowchilla River, California,  
5   is hereby authorized substantially in accordance with the  
6   recommendations of the Chief of Engineers in Senate Docu-  
7   ment Numbered 98, Eighty-seventh Congress, at an esti-  
8   mated cost of \$13,585,000.

9                               RUSSIAN RIVER BASIN

10       The project for Russian River, Dry Creek, California,  
11   is hereby authorized substantially in accordance with the  
12   recommendations of the Chief of Engineers in House Docu-  
13   ment Numbered 547, Eighty-seventh Congress, at an esti-  
14   mated cost of \$42,400,000.

15                             REDWOOD CREEK BASIN

16       The project for flood protection on Redwood Creek,  
17   Humboldt County, California, is hereby authorized sub-  
18   stantially in accordance with the recommendations of the  
19   Chief of Engineers in House Document Numbered 497,  
20   Eighty-seventh Congress, at an estimated cost of \$2,580,000.

21                             LOS ANGELES RIVER BASIN

22       In addition to previous authorizations, there is hereby  
23   authorized to be appropriated the sum of \$3,700,000 for the  
24   prosecution of the comprehensive plan for the Los Angeles



1 River Basin approved in the Act of August 18, 1941, as  
2 amended and supplemented by subsequent Acts of Congress.

3 ROGUE RIVER BASIN

4 The project for the Rogue River, Oregon and California,  
5 is hereby authorized substantially in accordance with the  
6 recommendations of the Chief of Engineers in House Docu-  
7 ment Numbered 566, Eighty-seventh Congress, at an esti-  
8 mated cost of \$106,700,000: *Provided*, That (a) the project  
9 is located, constructed, and operated to accomplish the bene-  
10 fits as set forth and described in the report of the district  
11 engineer and its appended report; (b) water for all purposes  
12 shall be released in the quantities and qualities at points  
13 described in the district engineer's report and its appendixes;  
14 (c) in the years of short water supply all water users will  
15 share the available water in the same proportions that they  
16 would share the total full supply when it is available and that  
17 no further water-use allocations will be made from the author-  
18 ized storage so as to retain the maximum possible benefits to  
19 authorized uses during the periods of adversity when storage  
20 shortages occur.

21 COLUMBIA RIVER BASIN

22 The project for the Burns Creek Dam and Reservoir,  
23 Snake River, Idaho, is hereby authorized substantially in  
24 accordance with the recommendations of the Chief of Engi-

1 neers in Senate Document Numbered 130, Eighty-seventh  
2 Congress, at an estimated cost of \$52,000,000.

3 The project for the Ririe Dam and Reservoir, Willow  
4 Creek, Idaho, is hereby authorized substantially in accord-  
5 ance with the recommendations of the Chief of Engineers  
6 in House Document Numbered 562, Eighty-seventh Con-  
7 gress, at an estimated cost of \$7,027,000.

8 The project for the Blackfoot Dam and Reservoir, Black-  
9 foot River, Idaho, is hereby authorized substantially in  
10 accordance with the recommendations of the Chief of Engi-  
11 neers in House Document Numbered 568, Eighty-seventh  
12 Congress, at an estimated cost of \$829,000.

13 The project for the Asotin Dam and Reservoir, Snake  
14 River, Idaho and Washington, is hereby authorized substan-  
15 tially in accordance with the recommendations of the Chief  
16 of Engineers in House Document Numbered 403, Eighty-  
17 seventh Congress, at an estimated cost of \$99,818,000.

18 The project for the China Gardens Dam and Reservoir,  
19 Snake River, Idaho, Oregon, and Washington, is hereby  
20 authorized substantially in accordance with the recommenda-  
21 tions of the Chief of Engineers in House Document Num-  
22 bered 403, Eighty-seventh Congress, at an estimated cost  
23 of \$74,777,000.

## 1 COOK INLET, ALASKA

2 The project for Bradley Lake, Cook Inlet, Alaska, is  
3 hereby authorized substantially in accordance with the rec-  
4 ommendations of the Chief of Engineers in House Document  
5 Numbered 455, Eighty-seventh Congress, at an estimated  
6 cost of \$45,750,000.

7 SEC. 204. That section 205 of the Flood Control Act of  
8 1948, as amended (33 U.S.C. 701s), is amended by, (a)  
9 striking out "\$10,000,000" and inserting "\$25,000,000"  
10 in lieu thereof, (b) substituting for the term "small flood  
11 control projects" the term "small projects for flood control  
12 and related purposes", and (c) striking out "*Provided, That*  
13 not more than \$400,000 shall be allotted for this purpose at  
14 any single locality from the appropriations for any one  
15 fiscal year" and inserting in lieu thereof "*Provided, That*  
16 not more than \$2,000,000 shall be allotted under this section  
17 for a project at any single locality and the amount allotted  
18 shall be sufficient to complete Federal participation in the  
19 project: *And provided further, That* no construction shall be  
20 undertaken on any project under the provisions of this section  
21 with a Federal cost in excess of \$1,000,000 unless such  
22 project has been approved by resolutions adopted by the  
23 Committee on Public Works of the Senate and the Com-  
24 mittee on Public Works of the House of Representatives,  
25 respectively."



1        SEC. 205. The consent of Congress is hereby granted to  
2 Duke Power Company, its successors and assigns, to con-  
3 struct, maintain, and operate a dam across Savannah River  
4 between Anderson County, South Carolina, and Elbert  
5 County, Georgia, near Middleton Shoals, and about two  
6 hundred and ninety-seven miles above the mouth of said river,  
7 for the purpose of providing a pool for condenser water for  
8 a steam-electric plant. Construction on such dam shall not  
9 be commenced until the plans therefor have been submitted  
10 to and approved by the Chief of Engineers, United States  
11 Army, and by the Secretary of the Army, and when such  
12 plans have been approved by the Chief of Engineers and  
13 by the Secretary of the Army, there shall be no deviation  
14 from such plans either before or after completion of said dam  
15 unless the modification of such plans has previously been  
16 submitted to and approved by the Chief of Engineers and  
17 the Secretary of the Army. In approving the plans for said  
18 dam such conditions and stipulations may be imposed as the  
19 Chief of Engineers and the Secretary of the Army may deem  
20 necessary to protect the present and future interest of the  
21 United States. Nothing in this section shall be construed to  
22 authorize the use of such dam to develop water power or  
23 generate hydroelectric energy. The grantee and its suc-  
24 cessors shall hold and save the United States free from  
25 all claims arising from damage which may be sustained by

1 the dam herein authorized, or damage sustained by the ap-  
2 purtenances of the said dam, by reason of the future con-  
3 struction and operation by the United States of Hartwell  
4 Reservoir or any other Federal project upstream or down-  
5 stream from the dam herein authorized. The authority  
6 granted by this section shall cease and be deemed null and  
7 void unless the actual construction of the dam hereby author-  
8 ized is commenced within four years and completed within  
9 seven years from the date of approval of this section. The  
10 right to alter, amend, or repeal this section is hereby ex-  
11 pressly reserved.

12       SEC. 206. The Secretary of the Army is hereby author-  
13 ized and directed to cause surveys for flood control and allied  
14 purposes, including channel and major drainage improve-  
15 ments, and floods aggravated by or due to wind or tidal  
16 effects, to be made under the direction of the Chief of Engi-  
17 neers, in drainage areas of the United States and its terri-  
18 torial possessions, which include the following named local-  
19 ities: *Provided*, That after the regular or formal reports  
20 made on any survey are submitted to Congress, no supple-  
21 mental or additional report or estimate shall be made unless  
22 authorized by law except that the Secretary of the Army  
23 may cause a review of any examination or survey to be made  
24 and a report thereon submitted to Congress, if such review  
25 is required by the national defense or by changed physical

1 or economic conditions: *Provided further*, That the Govern-  
2 ment shall not be deemed to have entered upon any project  
3 for the improvement of any waterway or harbor mentioned  
4 in this title until the project for the proposed work shall  
5 have been adopted by law:

6 Waccasassa River (Levy County and Gilchrist  
7 County), Florida.

8 Valenciana River, Puerto Rico.

9 Lake Pontchartrain, north shore, Louisiana.

10 San Bernard River, Texas.

11 Clear Creek, Texas.

12 Peytons Creek and tributaries, Texas.

13 Sacramento River Basin and streams in northern  
14 California draining into the Pacific Ocean for the pur-  
15 poses of developing, where feasible, multiple-purpose  
16 water resource projects, particularly those which would  
17 be eligible under the provisions of title III of Public  
18 Law 85-500.

19 Battle Creek, Sacramento River, California.

20 All streams in Santa Barbara County, California,  
21 draining the Santa Ynez Mountains, except Santa Ynez  
22 River and tributaries.

23 SEC. 207. Title II of this Act may be cited as the "Flood  
24 Control Act of 1962".



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# A BILL

Authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

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By Mr. DAVIS of Tennessee

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SEPTEMBER 28, 1962

Referred to the Committee on Public Works







# Digest of CONGRESSIONAL PROCEEDINGS

## OF INTEREST TO THE DEPARTMENT OF AGRICULTURE

OFFICE OF  
BUDGET AND FINANCE

(For information only;  
should not be quoted  
or cited)

Issued Oct. 2, 1962  
For actions of Oct. 1, 1962  
87th-2d, No. 178

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HIGHLIGHTS: For highlights see page No. 8.

### SENATE

1. AGRICULTURE AND FORESTRY COMMITTEE reported the following bills: p. 20245
  - S. 3756, without amendment, to amend Sec. 309 of the Food and Agriculture Act of 1962 so as to provide that a farm marketing quota on the 1963 wheat crop shall be applicable to any farm on which acreage of wheat exceeds the smaller of 15 acres or the highest number of acres planted to wheat on the farm in calendar years 1959, 1960, 1961, or 1963 (instead of 1959, 1960, or 1961) (S. Rept. 2224).
  - H. R. 12653, without amendment, to amend the Consolidated Farmers Home Administration Act of 1961 in order to increase from \$150 million to \$200 million annually the amount of loans which may be insured under the Act (S. Rept. 2220).
  - H. R. 10708, with amendment, to amend the Rural Electrification Act with respect to financing communication facilities for transmission of sounds, signals, pictures, writing, and signs, as well as voice (S. Rept. 2221).

H. R. 12855, without amendment, to amend provisions of the Agricultural Adjustment Act of 1938 providing for the lease and transfer of tobacco acreage allotment so as to exclude cigar-filler and cigar-binder tobacco, types 42,43,44,53,54, and 55 from the lease and transfer authority (S. Rept. 2222).

H. R. 946, without amendment, to extend to oyster planters the benefits of the provisions of present law which provide for production disaster loans for farmers and stockmen (S. Rept. 2219).

S. 3370, with amendment, to authorize the Secretary of Agriculture to relinquish to Wyo. jurisdiction over those lands within the Medicine Bow National Forest known as the Pole Mountain District (S. Rept. 2223).

2. APPROPRIATIONS; BUDGET. Received from the President supplemental appropriations for fiscal year 1963 for this Department (S. Doc. 152)(p. 20245). Attached to this Digest is a summary of the items pertaining to this Department.

3. PUBLIC WORKS APPROPRIATION BILL, 1963. Passed with amendments this bill, H.R. 12900. Conferees were appointed. pp. 20239-45

4. FARM PROGRAM. Sen. Humphrey criticized charges of the Republican National Committee against the Food and Agriculture Act of 1962 as "a deliberate and reckless attempt to turn farmers against consumers and city dwellers against rural America," and defended the Act against these charges. Sen. Kuchel defended the charges and contended that the farm bill had merited defeat. pp. 20335-6

Sen. Kuchel inserted an editorial critical of the farm program and relative experiences of Sen. Anderson in conducting farm operations under the program. p. 20336

5. WORLD FOOD CONGRESS. The "Daily Digest" states that the Foreign Relations Committee approved with amendment S. 3679, to authorize funds to enable the U. S. to extend an invitation to the Food and Agricultural Organization of the U. N. to hold a World Food Congress in the U. S. in 1963. p. D917

6. WATERSHEDS. The Agriculture and Forestry Committee approved the following watershed projects: Crooked Bayou, Ark.; West Fork Pond River, Ky., and Hardin Creek and Mill Creek, Tenn. p. D916

7. PUBLIC WORKS. The Public Works Committee reported without amendment (an original bill) S. 3773, the public works authorization bill (S. Rept. 2258), p. 20246

8. FOREIGN AID APPROPRIATION BILL, 1963. Began debate on this bill, H. R. 13175 (pp. 20248, 20260-2, 20270-92, 20298-329). By a vote of 34 to 40, rejected an amendment by Sen. Ellender to reduce by \$200 million the amounts for development loans and economic assistance (pp. 20314-9).

9. STATE, JUSTICE, AND COMMERCE, THE JUDICIARY, AND RELATED AGENCIES APPROPRIATION BILL, 1963. The Appropriations Committee reported with amendments this bill, H. R. 12580 (S. Rept. 2226). p. 20245

10. STATISTICS. The Post Office and Civil Service Committee reported without amendment H. R. 7791, to provide for the collection and publication of foreign commerce and trade statistics (S. Rept. 2217). p. 20245



House

Act

29. TRADE FAIRS. Passed under suspension of the rules S. 3389, to promote the foreign commerce of the U. S. through the use of mobile trade fairs. pp. 20354, 20399-401
30. AGRICULTURE COMMITTEE. The "Daily Digest" states that the Agriculture Committee "Passed over without prejudice H. R. 10101, to provide for a program of agricultural land development in Alaska; S. 3589, to acquire lands in Wright County, Minn., and exchange them with the State of Minnesota for State-owned lands in the Superior National Forest; and S. 3517, to establish and carry out a program to promote the flow of domestically produced lumber in commerce." p. D919
31. TRANSPORTATION. Passed under suspension of the rules, H. R. 12968, to remove the time limitation within which a vessel, otherwise qualified under this exception, could redocument under United States registry. pp. 20402-3
32. TAXATION. Received the conference report on H. R. 10650, the proposed Revenue Act of 1962 (H. Rept. 2508). pp. 20413-27
33. FOREIGN AFFAIRS. Received from the Secretary of State a draft of a proposed bill "authorizing an appropriation to enable the United States to extend an invitation to the Food and Agriculture Organization (FAO) of the United Nations to hold a World Food Congress in the United States in 1963"; to Foreign Affairs Committee. p. 20443
34. WILDLIFE. The Merchant Marine and Fisheries Committee reported without amendment H. R. 13176, to increase the participation by counties in revenue from the national wildlife refuge system. p. 20443
35. SMALL BUSINESS. The Select Committee on Small Business issued a report on the financing problems of small business (H. Rept. 2500). p. 20443
36. PUBLIC WORKS. The Public Works Committee reported with amendments H. R. 13273, the public works authorization bill (H. Rept. 2504). p. 20443

ITEMS IN APPENDIX

37. FOREIGN AID. Various insertions favoring and opposing the reductions made by the House in foreign aid appropriations. pp. A7187, A7197, A7213-4, A7218, A7223-5
38. TRANSPORTATION. Rep. McCormack commended and inserted an address by the president of the U. S. Freight Co., "Our Transportation Problems--Time for Action." pp. A7191-3
39. LEGISLATIVE PROGRAM. Extension of remarks of Rep. Pike reporting on the accomplishments of the 87th Congress. pp. A7195-6
40. INFORMATION. Extension of remarks of Sen. Humphrey inserting an article, "Representative John Moss Fights to Let Public Know What's Going On." pp. A7200-1
41. INTERGOVERNMENTAL RELATIONS. Extension of remarks of Rep. Fountain inserting a tabulation of the endorsement of State legislative recommendations of the Advisory Commission on Intergovernmental Relations. pp. A7211-2



BILLS INTRODUCED

42. IMPORTS. S. 3771, by Sen. Carlson, to amend the Tariff Act of 1930 to impose a duty upon the importation of bread; to Finance Committee.
43. PUBLIC WORKS. S. 3773, by Sen. Kerr, authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation flood control; placed on the calendar.
44. WILDLIFE. S. 3774, by Sen. Williams, N. J., to provide for a national black-bird control program; to Interior and Insular Affairs Committee. Remarks of author pp. 20337-9
45. PERSONNEL. H. R. 13280, by Rep. Beckworth, to amend the Civil Service Act of January 16, 1883, with respect to the filling of positions in the competitive civil service; to Post Office and Civil Service Committee.
46. FARM PROGRAM. H. R. 13281, by Rep. Betts, to reinstate the 15-acre farm marketing quota exemption for 1963; to Agriculture Committee.  
H. R. 13286, by Rep. Findley, to establish a corn support program for 1964 to Agriculture Committee.
47. FOREIGN TRADE. H. R. 13285, by Rep. Dingell, to amend the Export-Import Bank Act of 1945 to facilitate exports to areas with respect to which the United States is incurring a trade deficit; to Banking and Currency Committee.

BILLS APPROVED BY THE PRESIDENT :

48. HOUSING. H. R. 12628, to authorize a program of housing for the elderly in rural areas, which includes authorization of \$50 million additional in loan funds for Farmers Home Administration loans to the elderly for building or purchasing homes in rural areas, authorization for the appropriation of \$50 million for a new program of direct loans to private nonprofit corporations and consumer cooperatives to build moderate-cost rental housing for the elderly, a new insurance program to provide rental housing for the elderly in rural areas, and an increase in the rural grant ceiling from \$500 to \$1,000 for home improvements by owner-occupants whose incomes are so low they cannot qualify for loans from any source. Approved September 28, 1962 (Public Law 87-723).
49. FEDERAL-STATE COOPERATION. S. 3475, to provide further for cooperation with States in administration and enforcement of certain Federal laws relating to the marketing of agricultural products and to the eradication or control of plant and animal diseases and pests. Approved September 28, 1962 (Public Law 87-718).
50. PETRIFIED WOOD. H. R. 10540, to exclude depsoits of petrified wood from appropriation under the United States mining laws. Approved September 28, 1962 (Public Law 87-713).
51. WILDLIFE; RECREATION. H. R. 1171, to increase the public benefits from the national fish and wildlife conservation areas through their incidental or secondary use for public recreation. Approved September 28, 1962 (Public Law 87-714).
52. STOCKPILING. H. R. 12416, to waive the statutory requirement for a 6-month waiting period before GSA is authorized to dispose of 4,000 long tons of chestnut tannin extract from the national stockpile. Approved September 28,

RIVER AND HARBOR, BEACH EROSION CONTROL, AND  
FLOOD CONTROL PROJECTS

---

OCTOBER 1, 1962.—Ordered to be printed

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Mr. KERR (for Mr. CHAVEZ), from the Committee on Public Works,  
submitted the following

## R E P O R T

## TOGETHER WITH MINORITY VIEWS

[To accompany S. 3773]

The Committee on Public Works, reporting an original bill (S. 3773) authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes, having considered the same, report favorably thereon without amendment, and recommend that the bill do pass.

## PURPOSE OF THE BILL

The purpose of the bill is to authorize construction of certain navigation, beach erosion control, flood control, multiple-purpose, and related projects, on which favorable recommendations have been made by the Chief of Engineers; to authorize an increase in the monetary authorization for comprehensive river basin plans previously approved by Congress; authorize surveys of problems on streams in other localities, to be carried out by the Corps of Engineers; provide for reimbursement to local interests for work done on authorized beach erosion control projects, amends the existing law relative to beach erosion control projects; amends various other provisions of existing law relating to resource development; all works authorized herein to be prosecuted in accordance with existing law and stipulations contained in the appropriate project documents.

## HEARINGS

The Committee on Public Works held hearings for 13 days on projects and reports that had been transmitted to the Congress, on proposed legislation that had been referred to it, and on proposals for



development of the water resources of the Nation. Testimony was received from representatives of the Corps of Engineers, from Senators and Members of the House of Representatives, from Federal and State officials, representatives of local organization, and from citizens interested in specific projects and proposals. Careful consideration was given to the data presented at the hearings, the economics of the various projects, and the testimony of the various witnesses.

### GENERAL STATEMENT

This bill is a comprehensive measure to carry forward the important programs for development and improvement of the rivers and harbors of our Nation, for the protection of lives and property of our citizens against the ravages of floodwaters, for protection of our beaches against erosion, for development of hydroelectric power, where feasible, and for general development for all uses of the water resources of the Nation, which will contribute so much to the welfare and enjoyment of our citizens and to the enhancement of the national economy.

The matter of water resource development and conservation of water to meet the needs of the increased population of our Nation, is a problem of exceedingly great importance. This is not a new subject, and Congress has given consideration to the matter over a period of many years, as specific problems arose, disastrous floods occurred, and economic conditions changed.

The development of our rivers and harbors for navigation has been the responsibility of the Corps of Engineers since 1824. During this period our major harbors, inland waterways, and coastal streams have been developed to meet the needs of commerce, existing or prospective.

In 1925, Congress directed the Secretary of War, through the Corps of Engineers and the Federal Power Commission, jointly to prepare and submit an estimate of the cost of making examinations and surveys of those navigable streams and their tributaries where hydroelectric power development appeared feasible and practicable, with a view to formulation of general plans for improvement of navigation and the prosecution of such improvement in combination with efficient development of potential waterpower, control of floods, and the needs of irrigation. The cost estimates of the surveys were published in House Document No. 308, 69th Congress.

The River and Harbor Act of 1927 authorized prosecution of these extensive surveys by the Corps of Engineers alone. And in 1935, Congress directed that such surveys be supplemented by such additional study or investigation as the Chief of Engineers found necessary to take into account important changes in economic factors as they occur, and additional streamflow records, or other factual data became available. By June 30, 1949, these authorizations had resulted in surveys of 191 streams.

Following major floods in 1935 and 1936, Congress in the Flood Control Act of 1936, authorized numerous flood-control projects throughout the Nation, based largely on projects outlined in the 308 reports. In the declaration of policy in the 1936 act, it was recognized that destructive floods on the rivers of the United States constituted a menace to national welfare, and that flood control on navigable waters or their tributaries is a proper activity of the Federal Government, if the benefits to whomsoever they may accrue are in excess of



the estimated costs, and if the lives and social security of people are otherwise adversely affected.

In the 1936 statute, Congress declared that Federal investigations and improvements of rivers and other waterways for flood control and allied purposes shall be under the jurisdiction of and prosecuted by the Department of the Army under the direction of its Secretary and the supervision of the Chief of Engineers, and jurisdiction given to the Department of Agriculture with respect to investigations of watersheds and measures for runoff and waterflow retardation and soil-erosion prevention, except as to reclamation projects under the Department of the Interior.

All examinations and surveys authorized by Congress must include a comprehensive study of the watersheds, and each report thereon must include data relating to the extent and character of the area to be affected by the project, the probable effect upon any navigable water, the possible economical development and utilization of hydro-electric power, and other properly related uses. In the preparation of studies on flood control reservoir projects as in the case of like navigation improvements, reports must include specified information concerning possible damage to wildlife resources, and the possible use of dams as supports for highway bridges.

In the Flood Control Act of 1938, and subsequent omnibus acts, Congress has approved many comprehensive multiple-purpose plans for river basins. In most cases the complete plans were approved, and specific units authorized, or a certain monetary amount authorized for initiation and partial accomplishment of the authorized plan. When the monetary authorizations are depleted, additional amounts are authorized to carry the program forward on an efficient and economical rate of progress.

The Congress has authorized the Secretary of the Army to receive funds from States to be expended with Federal funds for authorized flood control work. This earlier authorization provided generally that plans for any reservoir project may be modified to provide additional storage capacity for domestic water supply or other conservation storage, if the cost of such increased capacity is contributed by local agencies and they agree to utilize the same in a manner consistent with Federal uses and purposes. The Water Supply Act of 1958 broadened the provisions for development of water supplies for domestic, municipal, and industrial purposes, in connection with construction and operation of Federal navigation, flood control, irrigation, or multiple-purpose projects. The act provided that storage could be included in any reservoir surveyed, planned, or constructed by the Corps of Engineers or the Bureau of Reclamation for present or anticipated future demand or need for municipal or industrial water, and to take into account the reasonable value of such water in estimating the economic value of the entire project. Provisions were also included for repayment of the cost of the storage for water supply purposes.

From time to time the various flood control and river and harbor acts have been amended to broaden their scope and provide needed related work and improvements. These amendments include amending the definition of flood control to include channel and major drainage improvements; construction of certain small flood control and navigation projects without specific congressional authorization; construction of improvements for recreation; leasing of reservoir lands;

permit rescue work during flood periods and repair or maintenance of existing flood control works during and following floods; construction of emergency bank protection of bridges; construction of small snagging and clearing projects for flood control; evacuation of flooded areas if more economical than providing flood protection for such areas; construction of fishways at dams; construction of school facilities at isolated reservoir projects; construction of bridges over dams; provision of power penstocks in dams where future development of hydroelectric power appears feasible; beach erosion control; and certain modification of authorized projects if deemed advisable by the Chief of Engineers.

The Federal Water Pollution Control Act Amendments of 1961 authorized the inclusion of storage in Federal reservoirs for regulation of streamflow for the purpose of water quality control, based on the determination of the need for such storage to alleviate stream pollution. The value of such storage is to be taken into account in determining the economic value of the entire project of which it is a part, with proper costs allocations made, the beneficiaries determined, and equitable costs reimbursed.

The Select Committee on National Water Resources, established by the Congress in 1959, conducted studies of the water resources activities in the United States, both governmental and nongovernmental, that can be expected to be required to provide the quantity and quality of water for use by the population, agriculture, and industry between the present time and 1980, along with allied uses, value, and benefits. The studies and recommendations of the select committee are available to the Senate in considering future water resources policies. The committee made 90 studies and held extensive hearings in all parts of the Nation. In its report the committee included its conclusions of the effort needed for meeting prospective demands on a long-range basis to permit continual national or regional economic growth, and recommended the necessary steps in planning comprehensive water resource development and management, scientific research, and cooperation with the States to encourage efficiency in water resource development and use. The long-range projections of the water supply and other needs indicate that even larger programs will be necessary if our water resource development needs are to be met on a schedule which will foster rather than deter our economic growth.

This bill is a combined omnibus river and harbor, beach erosion control, and flood control measure, consisting of two titles; title I including authorizations for river and harbor and beach erosion control projects, and general legislation applicable thereto; and title II including authorizations for flood control projects, increased monetary authorization for previously approved comprehensive basin plans, and general legislation relative to flood control measures.

The last general authorization bill was the act approved July 14, 1960. It has been the policy of the Congress to consider authorization bills of this nature at intervals of from 2 to 4 years. Since the last authorization bill, about 200 favorable survey investigations on proposed projects have been transmitted to Congress by the Chief of Engineers. In addition, a number of major river basin authorizations have been reduced by appropriations to a point where additional monetary authorization is urgently needed to continue construction of specific projects in the comprehensive plan for flood control, naviga-



tion, and other purposes, as originally approved by the Congress. There are also several matters concerning general legislation and modification of previous project authorizations which should be considered at this time.

The survey program forms the basis for the entire civil works program, and should be kept current and abreast of the present needs of various localities of our country. Many of the reports submitted to Congress by the Chief of Engineers are in compliance with resolutions of the Committees on Public Works requesting reviews of previous reports submitted. The bill includes authorization for additional surveys of flood control and navigation projects, and places authority for conducting surveys and examination of beach erosion control projects on the same basis as those on navigation and flood control projects.

The committee feels that the problems involved in the studies that have been completed and transmitted to Congress are important, urgent, and deserve early consideration, and that further delay would have unfortunate results in retardation of projects now under construction and others needed for prosecution of the program for full development of our national water resources. Provision of the necessary authorizations will permit these many important projects to proceed along with the large backlog of presently authorized projects, and continue the unified water resource development now in progress and round out programs where changing conditions have shown the necessity for extensions or modifications. These programs contemplate full coordination with other related programs to produce the ultimate goal of optimum economic utilization and development of our water resources. In addition to economic stimulation, these programs can be placed under construction at rates of speed and sequence of locations as may be most suitable to variations of unemployment, whenever economic emergencies arise without advance warning, thus proving to be very beneficial for redevelopment of distressed areas.

The passage of time provides evidence of the value of wise control, development, and utilization of our Nation's water resources, and of the need for careful planning to achieve this purpose. As additional projects are completed and placed in operation, larger benefits accrue therefrom. The planning involved in selection of projects and programs is of tremendous magnitude, and must be carefully coordinated with efforts by local, State, and other Federal agencies to reap the full effects on our national economy and welfare.

The committee is convinced that all the requirements of our water resource development program are increasing at an extremely rapid rate, and the growth of our national economy and population will continue to need and use all the sound navigation, flood control, multiple purpose, water supply, recreation, and other developments that it will be possible to provide in the foreseeable future. In addition to the large benefits from the civil works program measured in monetary terms, other values not taken into account, such as industrial development along navigable waterways, change in land uses, stabilization of industry, relief of unemployment, saving of life, improved health conditions, and the economic and social security of hundreds of urban communities and farming areas, are probably just as valuable to the American people.

In summation, the committee wishes to emphasize the role of water and land resource development in serving local and national goals in



the areas of economy, health, security, and the well-being of the general public. It feels the responsibilities of the Congress for the full and efficient development, utilization, and conservation of the Nation's water and related land resources as a means of advancing the national economy and promoting the welfare of our people. It is realized that we now have a large backlog of presently authorized projects. The projects recommended for authorization in this bill will supplement those projects and effectively serve national objectives of full development of the capabilities and potentials of the water resources of our country.

The estimated cost of projects recommended in this bill are those prevailing when the project documents were completed. It is felt that all the recommended projects have been given adequate study and review within the executive branch and by the affected States in accordance with the applicable laws and executive requirements, and have been transmitted to the Congress. The committee feels that these projects will constitute a prudent investment of Federal funds in permanent improvements believed to be sound from an engineering standpoint, and economically feasible as to the benefits that will accrue therefrom. It should be pointed out that the Federal investment in certain multiple-purpose features of many of the projects included in the bill will be returned to the Treasury.

The total amount of monetary authorization in this bill, broken down into the major categories, is indicated in the following tabulation:

*Monetary summary of bill (cost of new work)*

Title I.—Rivers and Harbors:

Sec. 101:

Navigation projects (13)-----	\$376, 498, 800
Beach-erosion control projects (11)-----	4, 875, 000
Monetary authorization (1)-----	1, 000, 000

Sec. 105: Illinois and Mississippi Canal (1)----- 800, 000

Sec. 107: Lock and dam No. 3, Big Sandy River, Ky. (1) -- 200, 000

Total, title I (86)----- 383, 373, 800

Title II.—Flood Control:

Sec. 203:

New projects or project modifications (106)-----	2, 199, 492, 500
Increased basin authorizations (10)-----	804, 000, 000

Sec. 204: Snettisham project, Alaska (1)----- 41, 634, 000

Sec. 205: Waurika project, Oklahoma (1)----- 25, 019, 500

Sec. 211: Missouri River Basin, Department of the Interior (1)----- 100, 000, 000

Total, title II (119)----- 3, 170, 146, 000

Grand total of bill (205)----- 3, 553, 519, 800

## TITLE I—RIVERS AND HARBORS

The Federal responsibility for sound and progressive development of the Nation's rivers and harbors in the interest of foreign and domestic commerce is now in its 138th year. During the entire period of this all-important Federal undertaking, the work involved in this program has been efficiently and competently supervised by the Corps of Engineers, U.S. Army. Since the early days of our country low-cost water transportation has been an important factor in our economic development. Most of our large cities and industries located on the coasts and on streams where water and water transportation were

available. Such transportation is still needed today with our more complex and competitive economy. The importance of a sound transportation system to our economy, security, and general welfare cannot be overemphasized and in achieving the balance of facilities necessary for maximum effectiveness, each mode of transportation must play the role for which it is best suited.

Our rivers and harbors program has produced the best system of inland waterways and coastal harbors to be found anywhere in the world. The program includes about 2,450 active navigation projects with an estimated cost of about \$5.5 billion. The federally improved waterways now in commercial use total almost 20,000 miles, of which about 50 percent provide depths in excess of 9 feet for modern barge transportation. Over 500 harbors on the coasts have been improved. During calendar year 1960, waterborne commerce of the United States was 1.1 billion tons.

The importance of the system of inland waterways is indicated by the vast annual increase in the tonnage and in the variety of commodities that move over these waterways. For each ton of freight that uses the improved inland waterways there is returned to the Nation as a general benefit, a saving in transportation costs. While these savings may be considered as a prime factor in the use of the system of inland waterways, another factor just as important is that the improved waterways have to a large extent been responsible for the growth and the development of the interior sections of the country. Low-cost water transportation has enabled the movement of products from the mines, forests, and the farms to a widespread consuming area. It has also enabled the distribution, at low cost, of semifinished and finished products from industrial communities that have been established on these waterways to the consumer spread over almost the entire Nation.

The importance of our improved ports cannot be overemphasized, both in times of peace and in times of national emergencies. The large ports serve their purposes in national and international commerce. The smaller ports from which the benefits are more of a domestic nature play a very vital part in the economic life of the country. These ports have frequently been constructed in the interests of the fishing industry which serves to supply the Nation with low-cost seafood products, and to serve as harbors of refuge and ports for recreational craft.

The coastal harbors of the United States have been improved under this program to meet the demands of modern deep-draft, oceangoing commerce. Channel depths of 35 feet prevail in harbors on the Atlantic seaboard and gulf coast and range up to 45 feet in depth as in New York Harbor. On the west coast, harbors and channels from 30 to 40 feet are generally available. Many of our existing harbors are now requiring greater navigation depths to meet the demands of deeper draft ore vessels, oil tankers, and general cargo vessels. These vessels with deeper draft, greater lengths and beams, have accelerated the need for progressive modification of the navigation program.

The committee has authorized studies of the harbors of the Great Lakes and connecting channels to determine the need for further improvement of the harbors in the interest of present and prospective deep-draft commerce, with special emphasis on accommodating the anticipated traffic from the St. Lawrence Seaway. That seaway which provides a controlling depth of 27 feet between Montreal,



Canada, and Lake Erie, was opened to traffic early in 1959. Deepening of the connecting channels in the Great Lakes to a controlling depth of 27 feet was authorized in 1956, and is nearing completion. In authorizing the improvement of the connecting channels, it was recognized that the potential benefits from deepening these channels would not be realized unless the harbors were deepened to accommodate the commerce that developed.

Consideration has been given to improvement of 58 harbors on the Great Lakes. To expedite early work on these harbors, interim reports were submitted on a large number of these harbors. The River and Harbor Act of 1960, included authorization for 17 of these projects. This bill recommends authorization for improvement of 16 additional harbors. These recommended improvements are for increased depths, channel widths, and maneuver areas in the harbors to accommodate the larger type vessels now in use and that will be constructed in the future and moved by way of the St. Lawrence Seaway and connecting channels. The recommended improvements are urgently needed and are economically justified. The benefits are generally based on interlake movements of iron ore, stone, grain, and coal, and reduction of damage to vessels and docks. The total tonnage benefited by the proposed harbor improvements will exceed 100 million tons annually, excluding seaway traffic and commerce carried in smaller vessels which would not benefit by the improvements.

There is an imperative and increasing need for improvement of shallow-draft channels and harbors for the growing fishing fleets, smaller tankers and dry-cargo vessels, and the rapidly expanding recreational fleets. These vessels have increased at an alarming rate, and play a vital role in the economic life of large areas of our country, many of which are almost entirely dependent on water transportation. Boating and sport fishing now provides recreational opportunities for a large number of people in areas far removed from our congested cities and highways. Boatbuilding and furnishing supplies and services required for recreational craft ahas become a major industry in many areas. Harbors provided for these boats are urgently needed to serve as harbors of refuge for the safety of small craft of all types and uses.

In the Fletcher Act, Public Law 16, 72d Congress, approved February 10, 1932, the Congress amended the definition of commerce of the United States to include "seasonal passenger craft, yachts, houseboats, fishing boats, motorboats, and other similar craft, whether or not operated for hire." Under this definition, the committee feels that the responsibility of the Federal Government in providing facilities for navigation and waterborne commerce extends to recreational boating and fishing craft. As these benefits are considered to be of a local nature, the policy has been adopted and projects have been authorized on the basis of Federal participation to the extent of 50 percent of general navigation facilities of that portion of the project costs allocated to recreation and the benefits derived therefrom, with the remaining 50 percent of such project costs assigned to local interests. This cost allocation is believed equitable under section 2 of the River and Harbor Act approved June 5, 1920, which provides for allocation of costs to local interests on the basis of local benefits.



The committee believes that a backlog of economically sound projects should be authorized to be available for selection and appropriation. It has carefully analyzed the reports and the testimony presented, and found that a number of harbors and channels are inadequate to accommodate new tankers and cargo vessels now in use. Many of these navigation facilities were constructed years ago to serve the now obsolete and rapidly vanishing vessels with shallow drafts and slow speeds. Vessels with deeper drafts and greater speeds now predominate in the trade using our channels and harbors. The efficiency and life of our merchant marine depends on its economical operation which requires harbors and channels that will permit loading to full draft; full speeds with safety and convenience; and rapid handling of cargo and quick turnaround. The savings resulting from this economical operation will be reflected in lower transportation charges which are a part of the delivered cost of cargoes.

Damages to coastal properties by waves and erosive currents is a problem of increasing concern along our coasts. Growing public demands for opportunities for healthful outdoor recreation, and the serious storm damage so recently experienced along our Atlantic beaches have focused attention on this portion of our water resource development program and the need for continuing progress in the solution of beach erosion problems. The committee feels that certain amendments to existing law are needed to facilitate the prosecution of this program, and place it more nearly on the same basis as other water resource development programs.

The program for prevention of beach erosion and shore protection is relatively new in comparison with the navigation program. Federal interest in this program dates back to 1930 when the Beach Erosion Board was established and authorized to make studies of this nature in cooperation with the States and other governmental bodies. Half of the cost of these studies is contributed by the sponsoring agency and half by the Federal Government. The scope of the studies as originally authorized was expanded by legislation after 1930, and in 1946 the Congress declared it to be the Federal policy to assist in the cost of works to protect publicly owned property, such participation not to exceed one-third of the construction cost with maintenance to be accomplished fully by local interests. In 1956, this policy was extended to shores other than public, and to periodic nourishment if the benefit arises from public use or from the protection of nearby public property.

Under the beach erosion control program, 81 projects have been authorized by Congress, of which 37 projects have had appropriations for partial reimbursement of construction by local interests. The total estimated Federal cost of these authorized projects is approximately \$38.3 million. Of this amount, about \$7.5 million has been appropriated to date, leaving a balance of \$30.8 million to complete. This bill includes 11 beach erosion control projects having an estimated Federal cost of \$4,875,000. In general, these provide for partial Federal participation in the cost of beach restoration, widening, periodic nourishment, and protection to be undertaken by local interests.

Following is an analysis of title I by section:

## SECTION 101

This section contains the actual project authorizations or modifications of existing authorizations which are shown in the following tabulation, together with their identifying document numbers and estimated costs. The preamble in this section is the same as that which has been carried in previous river and harbor acts and concerns procedures for submitting reports to the interested States and Federal agencies prior to submission to Congress.

Following the tabulation is a description of the individual projects:

*Navigation projects*

Project	Document No. <sup>1</sup>	Federal cost of new work
<b>Navigation:</b>		
Narraguagus River, Maine.....	H. 530, 87th Cong.....	\$500,000
Carvers Harbor, Vinalhaven, Maine.....	S. 118, 87th Cong.....	205,000
Searsport Harbor, Maine.....	H. 500, 87th Cong.....	700,000
Portland Harbor, Maine.....	H. 216, 87th Cong.....	8,340,000
Kennebunk River, Maine.....	H. 459, 87th Cong.....	270,000
Portsmouth Harbor and Piscataqua River, Maine.....	H. 482, 87th Cong.....	7,500,000
Gloucester Harbor, Mass.....	H. 341, 87th Cong.....	1,100,000
Marblehead Harbor, Mass.....	H. 516, 87th Cong.....	1,752,000
Chelsea Harbor, Mass.....	H. 350, 87th Cong.....	2,843,000
Dorchester Bay and Neponset River, Mass.....	S. 126, 87th Cong.....	7,050,000
Plymouth Harbor, Mass.....	S. 124, 87th Cong.....	1,200,000
Pawtuxet Cove, R.I.....	H. 236, 87th Cong.....	210,000
Great Lakes to Hudson River Waterway, N.Y.....		1,000,000
Little Neck Bay, N.Y.....	H. 510, 87th Cong.....	2,185,000
Flushing Bay and Creek, N.Y.....	H. 551, 87th Cong.....	1,695,000
Buttermilk Channel, N.Y.....	H. 483, 87th Cong.....	2,226,000
Raritan River, N.J.....	H. 455, 87th Cong.....	(2)
Lynnhaven Inlet, Bay, and connecting waters, Virginia.....	H. 580, 87th Cong.....	1,068,000
James River, Va.....	H. 586, 87th Cong.....	39,000,000
Rollinson Channel and channel from Hatteras Inlet to Hatteras, N.C.....	H. 457, 87th Cong.....	652,000
Wilmington Harbor, N.C.....	S. 114, 87th Cong.....	6,370,000
Savannah Harbor, Ga.....	S. 115, 87th Cong.....	605,000
Canaveral Harbor, Fla.....	S. 140, 87th Cong.....	5,076,000
Key West Harbor, Fla.....	S. 106, 87th Cong.....	820,000
Tampa Harbor, Port Sutton and Ybor Channels, Fla.....	H. 529, 87th Cong.....	997,000
Walter F. George lock and dam, Alabama.....	S. 109, 87th Cong.....	500,000
Pensacola Harbor, Fla.....	H. 528, 87th Cong.....	424,000
Pascagoula Harbor, Miss.....	H. 560, 87th Cong.....	4,870,000
Mississippi River, Baton Rouge to Gulf of Mexico, La.....	S. 36, 87th Cong.....	357,000
Mississippi River, Baton Rouge to Gulf of Mexico, barge channel through Devils Swamp, La.....		299,500
Bayous Terrebonne, Petit Caillou, Grand Caillou, DuLarge, and connecting channels, La.....	H. 583, 87th Cong.....	45,000
Gulf Intracoastal Waterway, La., and Tex.....	H. 556, 87th Cong.....	25,540,000
Cacassieu River salt water barrier, Louisiana.....	H. 582, 87th Cong.....	3,310,000
Mississippi River at Clarksville, Mo.....	H. 552, 87th Cong.....	103,000
Sandy Slough, Lincoln County, Mo.....	H. 419, 87th Cong.....	195,000
Sabine-Neches Waterway, Tex.....	H. 553, 87th Cong.....	20,830,000
Trinity River, Wallisville Reservoir, Tex.....	H. 215, 87th Cong.....	9,162,000
Gulf Intracoastal Waterway, channel to Palacios, Tex.....	H. 504, 87th Cong.....	818,000
Gulf Intracoastal Waterway, channel to Victoria, Tex.....	H. 298, 87th Cong.....	1,590,000
Illinois Waterway, Ill. and Ind.....	H. 31, 86th Cong.....	40,000,000
Kaskaskia River, Ill.....	S. 44, 87th Cong.....	58,200,000
Mississippi River between Missouri River and Minneapolis, Minn.....	H. 513, 87th Cong.....	1,205,000
Ontonagon Harbor, Mich.....	H. 287, 87th Cong.....	4,741,000
Muskegon Harbor, Mich.....	H. 474, 87th Cong.....	609,000
Leland Harbor, Mich.....	H. 413, 87th Cong.....	485,000
Little Bay De Noc, Gladstone Harbor, and Kilping, Mich.....	H. 480, 87th Cong.....	350,000
Green Bay Harbor, Wis.....	H. 470, 87th Cong.....	4,270,000
Kenosha Harbor, Wis.....	H. 496, 87th Cong.....	673,000
Manitowoc Harbor, Wis.....	H. 479, 87th Cong.....	719,000
Milwaukee Harbor, Wis.....	H. 134, 87th Cong.....	4,029,000
Chicago Harbor, Ill.....	H. 584, 87th Cong.....	1,505,000
Calumet Harbor and River, Ill. and Ind.....	H. 581, 87th Cong.....	11,464,000
New Buffalo Harbor, Mich.....	H. 481, 87th Cong.....	667,000
Caseville Harbor, Mich.....	H. 64, 87th Cong.....	327,000
Saginaw River, Mich.....	H. 544, 87th Cong.....	4,780,000
Rouge River, Mich.....	H. 509, 87th Cong.....	257,000
Huron Harbor, Ohio.....	H. 165, 87th Cong.....	8,557,000
Cleveland Harbor, Ohio.....	H. 527, 87th Cong.....	888,000

See footnotes at end of table, p. 11.



## Navigation projects—Continued

Project	Document No. <sup>1</sup>	Federal cost of new work
<b>Navigation—Continued</b>		
Conneaut Harbor, Ohio.....	H. 415, 87th Cong.....	\$6, 179, 000
Erie Harbor, Pa.....	H. 340, 87th Cong.....	671, 000
Buffalo Harbor, N. Y.....	H. 451, 87th Cong.....	2, 797, 000
Great Sodus Bay Harbor, N. Y.....	H. 138, 87th Cong.....	765, 000
Oswego Harbor, N. Y.....	H. 471, 87th Cong.....	1, 180, 000
Dana Point Harbor, Calif.....	H. 532, 87th Cong.....	3, 730, 000
Santa Barbara Harbor, Calif.....	H. 518, 87th Cong.....	3, 000, 000
Oakland Harbor, Calif., Fruitvale Ave. Bridge.....	S. 75, 87th Cong.....	1, 750, 000
Oakland Harbor, Calif.....	H. 353, 87th Cong.....	6, 775, 000
Noyo River and Harbor, Calif.....	S. 121, 87th Cong.....	13, 231, 000
Columbia and Lower Willamette Rivers Oreg. and Wash.....	H. 203, 87th Cong.....	493, 000
Columbia and Lower Willamette Rivers below Vancouver, Wash. and Oreg.....	H. 452, 87th Cong.....	20, 100, 000
Tacoma Harbor, Port Industrial and Hylebos Waterways, Wash.....	S. 104, 87th Cong.....	2, 460, 000
Kingston Harbor, Wash.....	H. 417, 87th Cong.....	428, 000
Swinhomish Channel, Wash.....	H. 499, 87th Cong.....	887, 000
Kaunakakai, Harbor, Molokai, Hawaii.....	H. 484, 87th Cong.....	7, 919, 000
Total, navigation (74 projects).....		377, 498, 800
<b>Beach erosion control:</b>		
State of New Hampshire.....	H. 416, 87th Cong.....	88, 000
Clark Point, New Bedford, Mass.....	H. 584, 87th Cong.....	60, 000
Virginia Beach, Va.....	H. 382, 87th Cong.....	( <sup>3</sup> )
Fort Macon, Atlantic Beach and vicinity, North Carolina.....	H. 555, 87th Cong.....	194, 000
Palm Beach County from Martin County line to Lake Worth Inlet, Fla.....	H. 164, 87th Cong.....	128, 800
Virginia Key and Key Biscayne, Fla.....	H. 561, 87th Cong.....	220, 000
San Juan and vicinity, Puerto Rico.....	H. 575, 87th Cong.....	65, 400
Lake Erie shoreline from Michigan-Ohio State line to Marblehead, Ohio.....	H. 63, 87th Cong.....	658, 500
Sheffield Lake Community Park, Sheffield Lake Village, Ohio.....	H. 414, 87th Cong.....	100, 300
Ventura-Pierpont area, California.....	H. 458, 87th Cong.....	515, 000
Orange County (San Gabriel River to Newport Bay) Calif.....	H.—, 87th Cong.....	2, 845, 000
Total, beach erosion control (11 projects).....		4, 875, 000
Grand total, title I (85 projects).....		382, 373, 800

<sup>1</sup> H. = House document, and S. = Senate document.<sup>2</sup> Maintenance only.<sup>3</sup> Beach nourishment.

## NARRAGUAGUS RIVER, MAINE

(H. Doc. 530, 87th Cong.)

*Location.*—In northeastern Maine about 35 miles east of Bangor.*Authority.*—House Public Works Committee resolution adopted June 27, 1956.*Existing project.*—Provides for a channel 200 feet wide and 11 feet deep from deep water in the bay to the original location of Lower Steamboat Wharf, thence 9 feet deep to the anchorage known as Deep Hole, a total distance of 1.5 miles.*Navigation problem.*—The present shallow depths hamper movement of loaded fishing craft to the canneries and there is a need for sheltered anchorage areas in the locality.*Recommended plan of improvement.*—Provides for a channel 11 feet deep and 150 feet wide from deep water in Narraguagus Bay to Wyman; thence 9 feet deep and 100 feet wide to Milbridge, with widening opposite Milbridge for an anchorage; and then 6 feet deep and 100 feet wide to the proposed town landing downstream from the highway bridge, with widening near the landing for an anchorage.



*Estimated cost (price level of March 1962).—*

Federal.....	\$500, 000
Non-Federal.....	5, 000
Total.....	505, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$14, 400	\$300	\$14, 700
Maintenance.....	7, 900		7, 900
Total.....	22, 300	300	22, 600
Annual benefits:			
Increased fish catch.....			14, 400
Reduced fish spoilage.....			21, 600
Total.....			36, 000

*Benefit-cost ratio.*—1.6, based on 100-year period of analysis.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for initial dredging and subsequent maintenance of the improvement and for aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil, and also necessary retaining dikes, bulkheads, and embankments therefor or the costs of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvements; provide and maintain without cost to the United States a suitable public landing at Milbridge with adequate supply facilities open to all on equal terms, in accordance with plans approved by the Chief of Engineers; and provide and maintain without cost to the United States adequate docking facilities at the terminals, including depths in berthing areas commensurate with the related project depths. They have indicated willingness to meet the requirements.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

State of Maine: Favorable.

*Comments of the Bureau of the Budget.*—No objections. Comments that economic evaluation of project is based on 100-year period of analysis, but project is feasible when evaluated on a significantly shorter period.

*Remarks.*—Many of the small harbors along the coast of Maine are used by lobster fishermen, but in addition, the Narraguagus River has three canneries that pack sardines caught offshore, and process herring and lobster. The community is dependent upon the canneries for a substantial portion of its income. There is some tourist business, but recreational boating is also important in the area. Washington County has been classified as a "distressed area," and improvement of the harbor would improve economic conditions in the area. The committee believes that the annual benefits from the project will provide a very favorable economical project.

## CARVERS HARBOR, VINALHAVEN, MAINE

(S. Doc. 118, 87th Cong.)

*Location.*—On the southwest side of Vinalhaven Island at the mouth of Penobscot Bay, about 15 miles southeast of Rockland, Maine.

*Authority.*—House Public Works Committee resolution adopted January 18, 1949.

*Existing project.*—Consist of dredging to a depth of 16 feet an area of 23 acres in the central part of the inner harbor; and to a depth of 10 feet two adjoining areas on the southeast, totaling 7 acres.

*Navigation problem.*—The principal difficulties are the maneuvering and docking of boats in the harbor at low tide.

*Recommended plan of improvement.*—Provides for deepening to 10 feet the area extending northwest from the present 23-acre anchorage to a line generally 50 feet from the existing wharves; and a channel 6 feet deep from the anchorage extension to the northeast part of the harbor, 75 feet wide for a distance of 325 feet, thence increasing to a width of 150 feet for a distance of 175 feet to form a basin.

*Estimated cost (price level of February 1962).*—

Federal.....	\$205, 000
Non-Federal.....	-----
Total.....	205, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$6, 100	-----	\$6, 100
Maintenance.....	1, 200	-----	1, 200
Total.....	7, 300	-----	7, 300
Annual benefits: Transportation savings in vessel operating costs.....			16, 100

*Benefit-cost ratio.*—2.2.

*Local cooperation.*—Provide, without cost to the United States, all lands, easements, and rights-of-way required for initial dredging and subsequent maintenance of the improvement upon the request of the Chief of Engineers, including suitable areas as may be determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil, and also necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvement; provide and maintain, without cost to the United States, depths in berthing areas and local access channels serving the terminals commensurate with the depths provided in the related project areas; and provide and maintain, without cost to the United States, a suitable public landing at the northeast end of the harbor open to all on equal terms and with adequate supply facilities and access to the dredged channel, in accordance with plans approved by the Chief of Engineers.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Maine: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—Carvers Harbor is located in one of the largest lobster fishing grounds of the Nation, and near the eastern fishing banks. The project is not large, but very important. Removal of navigation hazards and provision of anchorage areas in the harbor are urgently needed. The town's principal commercial activities are connected with fishing and boating. The annual benefits amply justify the project.

#### SEARSPORT HARBOR, MAINE

(H. Doc. 500, 87th Cong.)

*Location.*—On the west side of Penobscot Bay, about 30 miles from the entrance.

*Authority.*—House Public Works Committee resolution adopted June 3, 1959.

*Existing project.*—There is no existing Federal project at Searsport Harbor.

*Navigation problem.*—Shallow approach depths and limited turning areas of adequate depth require that larger vessels proceed to their berths at high tide and limit the size of vessels that may use the port.

*Recommended plan of improvement.*—Provides for the construction of an access channel 500 feet wide, 35 feet deep, to the deepwater piers at Mack Point, Searsport Harbor, Maine, with a turning basin of the same depth and a maximum width of 1,500 feet.

*Estimated cost (price level of March 1962).*—

Federal.....	\$700, 000
Non-Federal.....	
Total.....	700, 000

#### *Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$20, 300		\$20, 300
Maintenance.....	6, 200		6, 200
Total.....	26, 500		26, 500
Annual benefits: Transportation savings.....			474, 000

*Benefit-cost ratio.*—17.9.

*Local cooperation.*—Provide, without cost to the United States, all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project, and for construction and maintenance of aids to navigation, on request of the Chief of Engineers; hold and save the United States free from damages due to the construction and maintenance of the improvements; and provide and maintain, without cost to the United States, depths commensurate with the project depth in the berths and berth access channels of the two deep-draft wharves.



*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

State of Maine: Favorable.

*Comments of the Bureau of the Budget.*—No objection. Believes estimate of benefits optimistic, as field of petroleum transport is susceptible to rapid change as a result of technological change, but project is feasible.

*Remarks.*—There is no existing Federal project at Searsport Harbor, but the Federal Government dredged deep channels and berths in 1944, to facilitate movement of critical wartime cargoes. It is understood that pipelines for transporting aviation fuel extend from Searsport Harbor to airports in northern Maine. Use of larger tankers in the harbor is anticipated. The deeper access channel and turning basin are believed essential to care for present and prospective commerce. The committee notes the very favorable economic ratio of this project, and believes this to be a location where a minimum improvement provides a maximum benefit.

## PORTLAND HARBOR, MAINE

(H. Doc. 216, 87th Cong.)

*Location.*—Portland Harbor is at the southwest end of Casco Bay on the Maine coast, 100 miles northeast of Boston, Mass.

*Existing project.*—Includes a channel 35 feet deep with varying widths from the sea to the Boston & Maine Railroad bridge, with a 35-foot turning basin; two anchorages, one 35 feet deep and 170 acres in area, and one 30 feet deep east of the city; a channel from the 30-foot anchorage to Back Cove 30 feet deep and 300 wide, thence 14 and 12 feet deep within the cove; removal of rock ledges in the main ship channel to a depth of 40 feet; a breakwater 900 feet long at Spring Point, and one 2,000 feet long south of the inner harbor entrance; and maintenance of Soldier Ledge Channel in Hussey Sound at a depth of 40 feet. Local interests have provided terminal facilities as needed, including access channels and berths with adequate depths.

*Report authorized by.*—Resolution adopted by the Committee on Public Works of the House of Representatives on August 20, 1957.

*Desires of local interests.*—Deepen five rock ledges in the entrance channel to 45 feet; deepen House Island Anchorage to 45 feet; deepen and enlarge the 30-foot anchorage northwest of Diamond Island ledge to 35 feet; provide an alternative 45-foot channel between Hussey Sound and the House Island Anchorage; and deepen the Fore River Channel to 37 or 38 feet.

*Recommended plan of improvement.*—Provides for an entrance channel 1,000 feet wide and 45 feet deep from deep water in Casco Bay to a line opposite Fort Gorges, and deepening the existing House Island anchorage and maneuver area to a similar depth of 45 feet.

*Estimated cost (September 1960 price level).—*

Federal.....	\$8, 340, 000
Non-Federal.....	0
Total.....	8, 340, 000

These costs are exclusive of the cost of preauthorization studies and aids to navigation.

The estimated Federal cost for additional maintenance is \$4,100 annually.

*Local cooperation.*—These improvements are recommended subject to the provision that prior to construction, local interests agree to (a) hold and save the United States free from damages due to the construction and maintenance of said improvements; and (b) provide without costs to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of the aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil, and necessary retaining dikes, bulkheads, and embankments therefor, or the costs of such retaining works.

*Project economics.*—

Annual charges, all Federal:

Interest.....	\$220, 600
Amortization.....	83, 100
Additional annual maintenance.....	4, 100
Total.....	307, 800

Annual benefits:

Transportation savings.....	1, 464, 000
Elimination of anchorage delays.....	259, 700
Elimination of tidal delays.....	65, 900
Anticipated Fore River traffic.....	41, 100
Total.....	1, 830, 700

*Comparison of benefits and costs.*—Comparison of the estimated annual benefits of \$1,830,700 to the estimated annual charges of \$307,800, results in a benefit-cost ratio of 6 to 1.

*Benefits.*—Improvement of Portland Harbor will result in considerable annual benefits which are general in character. These benefits will be realized from existing and prospective commerce, both in crude petroleum and refined petroleum products. Commerce in crude petroleum is large oversea traffic from the Middle East and South America. For this type of traffic, shippers endeavor to reduce transportation costs by using larger tankers. The present navigational facilities in Portland Harbor are inadequate for the use of the larger tankers now in use or being constructed for this commerce. With the proposed improvement, the large tankers in the 55,000- to 73,000-ton class will be able to use the harbor. Annual savings in transportation costs will be realized for that portion of the prospective commerce carried by the larger type of vessel, and also for the smaller tankers in the 35,000- to 45,000-ton class, as these vessels can now use the harbor only during high-water periods. The proposed improvements will enable all vessels to use the harbor during any stage of the tide, therefore, benefits will be derived from elimination of the tidal delays. Further benefits will be derived from provision of sheltered anchorage within the harbor itself, which will eliminate the delays and operating costs for deep-draft vessels which now anchor in Hussey Sound outside the main harbor, and are frequently subject to weather and fog delays. Crude oil movement in the harbor is estimated to increase to 24 million tons. The improvements will provide room for vessels in case of sudden emergency, a place to remove oil-laden tankers from possible waterfront fire hazard, and a place of refuge from storms.

*Remarks.*—S. 2394, which passed the Senate on September 15, 1961, would provide authorization for the Portland Harbor project, as



included herein. The committee notes the high economic ratio, and believes this to be a very desirable project.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

State of Maine: Favorable.

*Comments of the Bureau of the Budget.—*The Bureau of the Budget has no objection; however, they consider that, if the project is authorized by Congress, funds to initiate construction should be requested only upon a determination that the economic justification for the project is not significantly impaired in light of Canadian oil policy as it may appear at that time.

KENNEBUNK RIVER, MAINE

(H. Doc. 459, 87th Cong.)

*Location.—*The Kennebunk River is located in southwestern Maine and discharges into the Atlantic Ocean about 30 miles southwest of Portland.

*Authority.—*Resolution, House Public Works Committee, adopted June 3, 1959.

*Existing project.—*Provides for a channel 4 feet deep, 100 feet wide and about 1 mile long from the ocean to Kennebunkport; three stone jetties, one 550 feet long on the east side of the river mouth, another 290 feet long on the west side, and a third of no specified length on the east bank.

*Navigation problem.—*Inadequate depths and insufficient anchorage areas result in lost fishing time and boat damage to the existing fishing and pleasure boat fleet.

*Recommended plan of improvement.—*A channel 8 feet deep and 100 feet wide extending 1,700 feet from deep water to the Town Landing, thence 6 feet depth over a width of 100 feet for a distance of 2,300 feet and a width of 75 feet for the remaining 2,000 feet to the project limit; an anchorage, 4 acres in area on the west side of the channel and an anchorage 2 acres in area on the east side, each 6 feet deep; and extension of the west jetty by about 300 feet, supplemented by construction of a sand fence.

*Estimated Cost (price level of September 1961).—*

Federal.....	\$270, 000
Non-Federal.....	90, 000
Total.....	360, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$8, 000	\$3, 250	\$11, 250
Maintenance.....	4, 300		4, 300
Total.....	12, 300	3, 250	15, 550
Annual benefits:			
Damages prevented.....			3, 800
Commercial fishing.....			29, 830
Recreational boating.....			27, 230
Total.....			60, 860



*Benefit-cost ratio.*—3.9 Based on 100-year life analysis.

*Local cooperation.*—Contribute in cash 25 percent of the first cost of construction due to recreational boating benefits, such contribution, presently estimated at \$90,000, to be paid in a lump sum prior to initiation of construction, subject to final adjustment after actual costs have been determined; provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the improvements and for aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the costs of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvements; and improve and maintain the existing public landing, including access to the dredged channel, open to all on equal terms. Local interests have expressed a willingness to meet the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Maine: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The proposed increase in channel depths and anchorage basins will improve operating conditions and provide safe refuge for the large fishing and recreational craft in this locality, and are amply justified. The local cash contribution required in recognition of recreational benefits of a local nature appears equitable and reasonable.

#### PORTSMOUTH HARBOR AND PISCATAQUA RIVER, MAINE AND N.H.

(H. Doc. 482, 87th Cong.)

*Location.*—Portsmouth Harbor is located 45 miles northeast of Boston Harbor and 37 miles southwest of Portland Harbor at the mouth of the Piscataqua River. The river is about 13 miles long and forms a portion of the boundary of the States of Maine and New Hampshire.

*Authority.*—The report is in partial response to resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on November 18, 1958, and June 3, 1959, respectively.

*Existing project.*—The existing project for Portsmouth Harbor and Piscataqua River, Maine and N.H., completed in 1956, provides for the removal of ledge rock areas in the vicinity of Gangway Rock, southwest point of Badgers Island, and Boiling Rock to a depth of 35 feet.

*Navigation problem.*—High velocity current flows and a tortuous channel with sharp bends and submerged ledges makes navigation for deep-draft vessels hazardous.

*Recommended plan of improvement.*—Provides for improvement of the river channel from Henderson Point to Newington by widening and deepening to 35 feet below mean low water the bends at Henderson Point, Gangway Rock, and the southwesterly point of Badgers Island; widening the channel between Badgers Island and Nobles Island; widening the bend east of the Maine-New Hampshire interstate bridge to provide a better approach to the bridge; removing the 26-foot

shoal at the south edge of the channel west of the Maine-New Hampshire interstate bridge; widening the bend at Boiling Rock, including removal of the pinnacle of Boiling Rock; providing a 950-foot-wide turning basin immediately upstream; and improving the channel from Boiling Rock to Newington to a depth of 35 feet, generally 400 feet wide, and providing a turning basin 850 feet wide by dredging shoals.

*Estimated cost (price level of January 1962).—*

Federal.....	\$7, 500, 000
Non-Federal.....	0
Total.....	7, 500, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$214, 000	0	\$214, 000
Maintenance dredging.....	10, 000		10, 000
Maintenance on navigation aids.....	600		600
Total.....	224, 600		224, 600
Annual benefits: Savings in transportation costs.....			482, 000
Total.....			482, 000

*Benefit-cost ratio.—2.1.*

*Local cooperation.*—Hold and save the United States free from damages due to the construction and maintenance of the improvements; provide all lands, easements, and rights-of-way necessary for the construction and subsequent maintenance of the project and for aids to navigation upon the request of the Chief of Engineers; and provide and maintain without cost to the United States depths in berthing areas and local access channels serving the terminals commensurate with the depths provided in the related project areas. Local interests have agreed to furnish the required items of local cooperation.

*Comments of the States and Federal agencies.—*

Department of the Interior: Favorable.

State of Maine: Favorable.

State of New Hampshire: Favorable.

*Comments of the Bureau of the Budget.*—No objection. Comments on the field of petroleum transport being susceptible to rapid change from developing technology.

*Remarks.*—The area tributary to Portsmouth Harbor is a populous industrial area, and one of the fastest growing areas of Maine and New Hampshire. This harbor is the port for New Hampshire and southern Maine, and is primarily a petroleum terminal. Petroleum commerce is expected to increase with the use of supertankers. The harbor is now a naturally deep harbor, but does have rather tortuous channels, and because of the large tidal basin involved, there are very strong currents which limit navigation by large vessels to periods of slack water. A deeper channel and turning basins will remove some of the navigational hazards for deep-draft vessels and provide greater maneuvering area. The committee believes the project is needed and notes that it is well justified economically.

## GLOUCESTER HARBOR, MASS.

(H. Doc. 341, 87th Cong.)

*Location.*—Gloucester Harbor, Mass., is located at the southern end of Cape Ann on the Atlantic Ocean, about 25 miles northeast of Boston Harbor.

*Report authorized by.*—Resolutions of the Committees on Public Works of the Senate and House of Representatives adopted March 30, 1955.

*Existing project.*—The outer harbor, about 1,000 acres in area at the 18-foot contour, contains two coves and two minor harbors. The inner harbor, in which the oceangoing commerce is conducted, consists of about 52 acres at the 18-foot contour and contains two coves, Harbor Cove and Smith Cove. Authorized improvements consist of a rubblestone breakwater 2,250 feet long from Eastern Point over Dog Bar to Cat Ledge at the ocean entrance to the outer harbor; removal of three ledges in the inner harbor and five in the outer harbor; removal of ledges and boulders and channel dredging to 15 feet near the wharves in the inner harbor; dredging Harbor Cove to a depth of 10 feet; and a connection channel 8 feet deep through Annisquam River. The last modification of the project was authorized on August 30, 1935. The project was completed in 1958 at a cost of \$758,900. Expenditures for maintenance total \$410,000.

*Recommended plan of improvement.*—Provides for modification of the existing project to provide (a) an entrance channel into the inner harbor, 300 feet wide and 20 feet deep, with a turning basin 600 feet wide; (b) an access channel, 200 to 250 feet wide and 20 feet deep, along the waterfront northwest of the Gloucester fish pier; (c) an access channel 200 feet wide and 20 feet deep, along the waterfront southeast of the Gloucester fish pier; (d) an access channel, 650 to 300 feet wide and 16 feet deep, extending into Smith Cove; (e) an access channel, from 500 to 100 feet wide and 18 feet deep, along the waterfront west of Harbor Cove and into Harbor Cove; (f) an anchorage of about 5 acres, 15 feet deep, east of the entrance to Harbor Cove; (g) an anchorage of about 10 acres, 16 feet deep, opposite the entrance to Smith Cove; and (h) removal of the isolated rock shoal adjacent to the entrance channel south of Harbor Cove to a depth of 24 feet.

*Estimated cost (November 1960 price levels).*—Federal, all, \$1,100,000.

*Project economics.*—

## Annual charges:

Interest.....	29, 600
Amortization.....	11, 100
Maintenance.....	13, 700
Navigation aids.....	600

Total annual charges.....	55, 000
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## Annual benefits:

Elimination of tidal delays.....	133, 600
Prevention of damages.....	14, 000

Total annual benefits.....	147, 600
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NOTE.—Benefit-cost ratio 2.7 overall. The benefit-cost ratios for the various items of improvement ran from 1.5 to 5.



*Local cooperation.*—(a) Provide, without cost to the United States, all lands, easements, and rights-of-way required for construction of the project, including spoil-disposal areas for construction and subsequent maintenance if needed; (b) hold and save the United States free from damages due to the construction works; and (c) provide and maintain depths in berthing areas and local access channels commensurate with the depths provided in the related project areas.

*Comments of State and Federal agencies.*—Bureau of the Budget (no objection); Commonwealth of Massachusetts (approves); Department of the Interior (no objection).

*Benefits.*—Gloucester Harbor is one of the largest fishing ports in the United States. The principal industries in the area are fishing, importing of fish, boatyard and marine railway activity, and manufacturing. The entire Cape Ann area constitutes a well-developed recreational area. The normal population of 25,000 is greatly increased by summer residents. Waterborne commerce in 1959 was 185,093 tons, and 171,500 tons in 1960, of which 82 percent was fish or fish products and 10 percent was petroleum products. Import-export commerce amounted to 52,400 tons in 1959. Commercial vessels with drafts ranging up to 15 feet made 19,738 trips in the harbor in 1959.

Local interests desire deepening and widening the channels, removal of all ledges and underwater obstructions, and provision of turning basins and anchorages. They consider the recommended improvements essential for continued expansion of the fishing industry and elimination of navigation hazards to shipping. The Gloucester City Council has voted to meet the requirements of local cooperation.

The general navigation facilities at Gloucester Harbor are inadequate for the present needs for commercial shipping and commerce. The recommended improvements will provide adequate channels to reduce tidal delays for vessels having a draft of 11 feet and greater; provide safe clearances over ledge areas and rock shoals that are hazards to navigation; provide anchorage space for vessels not actually loading or unloading to eliminate congested conditions at terminals; and provide anchorage space for smaller vessels that require shelter from storms.

*Committee views.*—The committee believes that the proposed improvements will improve operating conditions in Gloucester Harbor and eliminate delays caused by boats awaiting high tides, or circuitous travels through the area. The main industries of the area—fishing, fish processing, boatbuilding, repair and servicing, and summer recreational business—will be stimulated, and these businesses will provide many benefits. The project is believed well justified from an economic standpoint. The committee understands that this area is economically depressed at the present time with considerable unemployment. Stimulation of business and the fishing industry should assist in the relief of unemployment. The allocation of the entire cost of the project to the Federal Government is believed equitable, as all the monetary benefits assigned will be derived from general commerce.

S. 3544, which passed the Senate on August 2, 1962, would provide authorization for the Gloucester Harbor. The project is well justified, and authorization is urgently needed.

## MARBLEHEAD HARBOR, MASS.

(H. Doc. 516, 87th Cong.)

*Location.*—North of Boston, about halfway between Boston and Gloucester, Mass.

*Authority.*—House Public Works Committee resolution adopted June 2, 1949.

*Existing project.*—The Federal navigation project provides for a 13-acre anchorage area 20 feet deep; a 16-acre anchorage area 9 feet deep; and repair to the seawall.

*Navigation problem.*—There is a need for additional anchorage area and greater protection for present and future fleets using the harbor.

*Recommended plan of improvement.*—Provides for construction of a stone breakwater 1,200 feet long and that the existing project be abandoned.

*Estimated cost (price level of July 1961).*—

Federal.....	\$1, 752, 000
Non-Federal.....	648, 000
Total.....	2, 400, 000

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$50, 140	\$23, 460	\$73, 600
Maintenance and operation.....	18, 750		18, 750
Total.....	68, 890	23, 460	92, 350
<b>Annual benefits:</b>			
Commercial fishing.....			56, 400
Recreational boating.....			66, 100
Total.....			122, 500

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Contribute, in cash, 27 percent of the first cost of construction due to benefits to recreational boating, such contribution, presently estimated at \$648,000, to be paid in a lump sum prior to initiation of construction, subject to final adjustment after actual costs have been determined; provide, without cost to the United States, all lands, easements, and rights-of-way necessary for construction and maintenance of the project when and as required, including access for a contractor and his equipment to construct the breakwater from land; hold and save the United States free from damages that may result from construction and subsequent maintenance of the project; and provide assurances that the existing public landings or their equivalent will be adequately maintained during the life of the project and will be open to all on equal terms. Local interests have provided assurances that the requirements of local cooperation will be met.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Massachusetts: Favorable.

*Comments of the Bureau of the Budget.*—No objection. Believes justified on a 50-year period of analysis.

*Remarks.*—This harbor is presently used by about 90 commercial fishing boats and about 1,000 recreational boats, valued at about \$4.5 million. It is one of the most important yachting centers in America and has a large summer population. The proposed breakwater will provide greater protection for present and future local and transient fleets using the harbor; permit a larger and expanded boating season; reduce storm damages to all types of craft, and add additional sheltered mooring area in the harbor. The project is well justified, and the large local cash contribution appears equitable.

CHELSEA RIVER (BOSTON HARBOR), MASS.

(H. Doc. 350, 87th Cong.)

*Location.*—Chelsea River is a coastal stream emptying into Boston Harbor, Mass.

*Authority.*—Resolution of the Public Works Committee, U.S. House of Representatives, adopted February 1, 1946.

*Existing project.*—The Federal navigation project consists of a channel 30 feet deep and generally 200 feet wide from the mouth of the river, upstream for a distance of 2 miles; thence 8.4 feet deep and 150 feet wide for a distance of 0.5 mile to the head of navigation.

*Navigation problem.*—Inadequate depths make navigation hazardous and results in delays to deep-draft commercial traffic using the harbor.

*Recommended plan of improvement.*—Provides for a channel in Chelsea River 35 feet deep from the Boston Harbor main ship channel to the Chelsea Street Bridge, generally 225 to 250 feet in width; a channel 35 feet deep varying in width from 250 to 430 feet above the Chelsea Street Bridge; a maneuvering basin 35 feet deep with 800 feet average width and 1,000 feet average length; and deauthorization of the 30- and 8.4-foot channels lying in the waterway outside the presently recommended 35-foot project limits for Chelsea River.

*Estimated cost (price level of July 1960).*—

Federal.....	\$2, 843, 000
Non-Federal.....	2, 140, 000
Total.....	4, 983, 000

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$103, 400	\$91, 200	\$194, 600
Maintenance and operation.....	2, 500		2, 500
Total.....	105, 900	91, 200	197, 100
<b>Annual benefits:</b>			
Transportation savings.....			531, 350
Towboat savings.....			66, 900
Reduction in tidal delays.....			184, 000
Total.....			782, 250



*Benefit-cost ratio.*—4.0.

*Local cooperation.*—Provide lands, easements, and rights-of-way required for construction of the project; hold and save the United States free from damages due to construction and maintenance; provide and maintain berthing areas; relocate Northeast Petroleum Corp. wharf as needed; and accomplish alterations in gas siphon, water tunnel, submarine cable, and other utilities as needed. Local interests have indicated willingness to cooperate.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Massachusetts: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—Chelsea River is an arm of Boston Harbor, used primarily for receipt of petroleum products, which are distributed by truck and rail over a large area. It is a commercial harbor. The large cost of local cooperation is for lowering of utilities and relocation of a wharf. The existing channel is too shallow and narrow for safe transit of tankers, except during periods of favorable tides and with tugboat assistance. The larger vessels supplanting the T-2 type tankers are too large to use the existing channel and turning basin. Empty tankers are now towed, stern first, down the channel because of the lack of an adequate turning basin. The committee was impressed by the 4-to-1 economic ratio of this project.

#### DORCHESTER BAY AND NEPONSET RIVER, MASS.

(S. Doc. 126, 87th Cong.)

*Location.*—Dorchester Bay and Neponset River are located in the southern part of Boston Harbor.

*Authority.*—Senate Committee on Public Works resolution adopted October 15, 1957.

*Existing project.*—The Federal project provides for a channel 18 feet deep and 175 feet wide from the main ship channel to Commercial Point, and 15 feet deep and 100 feet wide in Neponset River to the Neponset Highway Bridge.

*Navigation problem.*—Proposed steam-electric plant of Boston Edison Co. at Squantum Point depends upon 35-foot-depth channel and appropriate turning basin.

*Recommended plan of improvement.*—Provide a channel 35 feet deep and 300 feet wide from the Boston Harbor to the vicinity of Squantum Point, with a turning basin of the same depth.

*Estimated cost (1961 price level).*—

Federal.....	\$7, 050, 000
Non-Federal.....	315, 000
Total.....	7, 365, 000

*Project economics (100-year analysis basis).*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$201, 000	\$12, 800	\$213, 800
Maintenance and operation.....	10, 000		10, 000
Aids to navigation.....	1, 000		1, 000
Total.....	212, 000	12, 800	224, 800
Annual benefits: Savings in oil costs.....			659, 600

*Benefit-cost ratio.*—2.9.

*Local cooperation.*—Construct the first 250,000-kilowatt unit of the proposed powerplant; provide all lands, easements, and rights-of-way needed for the project; provide an approach channel and berth with depths commensurate with recommended project; and hold and save the United States free from damages.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

State of Massachusetts: Favorable.

*Comments of the Bureau of the Budget.*—No objection subject to the understanding that, prior to a request for funds to initiate construction of the project, if authorized, more definite evidence be presented to show that other industries would utilize the deep-draft channel, in order to assure that Federal funds are not expended solely for the benefit of a single user.

*Remarks.*—Acquisition of the Squantum Point Naval Air Station by the Boston Edison Co. was for the purpose of constructing a 1,300,000-kilowatt electric generating plant on the site, to assist in provision of electric service to the Greater Boston area. A channel and turning basin, as recommended, would permit direct delivery of fuel oil by tanker, or coal by supercolliers. This area is stated to be one of the few remaining in Boston Harbor suitable for industrial expansion. The committee is of the opinion that the development of this channel will attract other industries to this particular area, and that the channel will not be under the one-user concept. The economic justification is dependent upon the use of the channel initially by the power company, and initiation of the channel should proceed concurrently with initiation of construction of the powerplant. The high economic ratio is based on a 100-year period, but the project is well justified on a 50-year basis.

#### PLYMOUTH HARBOR, MASS.

(S. Doe. 124, 87th Cong.)

*Location.*—On the coast of Massachusetts about 45 miles south of Boston.

*Authority.*—Senate Public Works Committee resolution adopted April 20, 1948.

*Existing project.*—Existing Federal navigation project provides for an 18-foot channel from deep water to the State pier, a distance of about 2.5 miles; a channel 15 feet deep from the State pier for a distance of 0.3 mile terminating in a 300-square-foot turning basin of the same depth; an 18-foot anchorage adjacent to the 18-foot channel; maintenance of the area in the vicinity of the State pier dredged by Commonwealth; and riprap protection for sections of Long Beach and restoration of Eel River to its former course. Local interests have provided various navigation and waterfront improvements.

*Navigation problem.*—There is a need for additional anchorage area and greater protection for present and future fleets using Plymouth Harbor.

*Recommended plan of improvement.*—Provides for a rubberstone breakwater extending 1,400 feet easterly from a point north of the town wharf, and thence southeasterly for a distance of 2,100 feet; an anchorage 8 feet deep and 60 acres in area inside the breakwater; and

elimination of the authorized 18-foot anchorage from the existing project.

*Estimated cost (price level of July 1961).—*

Federal.....	\$1, 200, 0000
Non-Federal.....	300, 000

Total.....	1, 500, 000
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*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$43, 880	\$12, 800	\$56, 680
Maintenance.....	10, 000		10, 000
Maintaining navigational aids.....	120		120
Total.....	54, 000	12, 800	66, 800
<b>Annual benefits:</b>			
Storm damages prevented.....			12, 000
Commercial fishing.....			68, 800
Recreational boating.....			41, 000
Total.....			121, 800

*Benefit-cost ratio.—1.8.*

*Local cooperation.*—Contribute in cash 20 percent of the first cost of construction due to benefits to recreational boating, such contribution, presently estimated at \$300,000, to be paid in a lump sum prior to initiation of construction, subject to final adjustment after actual costs have been determined; maintain existing public landings open to all on equal terms and provide without cost to the United States all necessary mooring facilities in the anchorage; provide without cost to the United States all lands, easements, and rights-of-way necessary for construction and subsequent maintenance of the project and of aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; and hold and save the United States free from damages due to the construction and subsequent maintenance of the project. Local interests have provided assurances that the requirements of local cooperation will be met.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Commonwealth of Massachusetts: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—This harbor is the center for a large commercial fishing fleet and provides an anchorage for many pleasure craft. It is well located as a harbor of refuge for many types of craft using this coastal area. The tourist business at Plymouth is increasing each year. The recommended improvements will provide additional anchorage area for the expanding fleet, provide some protection to the boats from hurricanes and tidal waves, and permit longer boating season. The committee believes the project is well justified. The local contribution appears appropriate.



## PAWTUXET COVE, R.I.

(H. Doc. 236, 87th Cong.)

*Location.*—At the mouth of the Pawtuxet River, a tributary of the Providence River which empties into Narragansett Bay.

*Authority.*—Resolution by the House Public Works Committee adopted April 5, 1949.

*Existing project.*—No Federal project.

*Navigation problem.*—Navigation is hampered by shallow depths in the entrance channel and in the channel inside the cove. There is no available anchorage area where boats can moor without grounding at low tide. Boat damages result due to these conditions.

*Recommended plan of improvement.*—A channel 100 feet wide and 6 feet deep from deep water to the head of the cove, with a turning basin near the upper end; and an anchorage of about 14 acres, 6 feet deep, south of the entrance channel— with a sheltering dike, 2,200 feet long, constructed to 12 feet above mean low water, on the east side of the anchorage.

*Estimated cost (price level of August 1960).*—

Federal.....	\$210, 000
Non-Federal.....	210, 000
<b>Total.....</b>	<b>420, 000</b>

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$8, 300	\$9, 000	\$17, 300
Maintenance.....	8, 400		8, 400
<b>Total.....</b>	<b>16, 700</b>	<b>9, 000</b>	<b>25, 700</b>
<b>Annual benefits:</b>			
Damages prevented.....			1, 200
Small boat harbor.....			35, 000
Land fill.....			2, 000
<b>Total.....</b>			<b>38, 200</b>

*Benefit-cost ratio.*—1.5.

*Local cooperation.*—Contribute in cash 50 percent of the first cost of construction of the general navigation facilities, such contribution, presently estimated at \$210,000, to be paid in a lump sum prior to initiation of construction, subject to final adjustment after actual costs have been determined; provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the costs of such retaining works; hold and save the United States free from damages due to the construction and maintenance of the project; provide and maintain without cost to the United States necessary mooring facilities and utilities, including two public landings with suitable supply facilities, open to all on equal terms; regulate the use of the harbor facilities with the understanding that the facilities

will be open to all on equal terms; and, remove or relocate locally constructed navigation aids. Local interests are willing to meet the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Rhode Island: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee believes that the proposed improvements will provide adequate entrance channels and turning basins, and shelter from storms, for the small number of commercial fishing vessels, and the large number of recreational craft. Benefits are largely local from recreational navigation and some increase in local land values. The proposed local cooperation of 50 percent of the cost is considered equitable in view of the local aspects of recreational navigation benefits.

#### GREAT LAKES TO HUDSON WATERWAY, N.Y.

This waterway consists of that portion of the New York State Barge Canal system extending from the Hudson River at Waterford to Oswego Harbor on Lake Ontario.

The existing project provides for the allotment of Federal funds to the State of New York for expenditure under suitable Federal control and supervision in the improvement of the canal connecting Lake Ontario with the Hudson River. The improvement provides for a depth of 13 feet below normal pool level through all locks between Waterford and Oswego, deepening between locks to 14 feet below normal pool level, widening at bends and elsewhere, and increasing the overhead clearance to 20 feet at maximum navigable stage at bridges and other overhead structures. The widths of channel to be provided under the project are 104 feet in earth cuts, 120 feet in rock cuts, 200 feet in river sections, with widening at bends and elsewhere as may be necessary.

The length of the waterway included in the project is about 184 miles, of which 160 miles are in the Erie Canal from Waterford to Three Rivers Point and 24 miles are in the Oswego Canal from Three Rivers Point to Oswego.

The project was authorized by the act of August 30, 1935, in accordance with Rivers and Harbors Committee Document 20, 73d Congress, and the act of March 2, 1945, in accordance with Senate Document 252, 79th Congress.

The estimated cost of the project based on cost levels of July 1961, is \$37,300,000. The authorizing act includes \$27 million to be expended on deepening between the locks and raising the bridges and other overhead clearances.

Work on the project was started in September 1935, and is about 84 percent complete.

The committee has authorized a review survey of this project, which is now in progress. The entire authorization limitation of \$27 million has been appropriated. The committee believes that the existing authorization should be increased by \$1 million to complete work under construction, and carry forward essential work until the outstanding review report is completed.

## LITTLE NECK BAY, N.Y.

(H. Doc. 510, 87th Cong.)

*Location.*—Little Neck Bay is on the north shore of Long Island, at the westerly end of Long Island Sound, about 17 miles northeast of the Battery, New York City.

*Authority.*—Resolutions of the Public Works Committees of the Senate and House of Representatives adopted November 14, 1957, and July 16, 1958, respectively.

*Existing project.*—There are no Federal improvements for navigation in the bay.

*Navigation problem.*—Difficulties arise from insufficient depth in the southerly part of the bay. Larger vessels are forced to moor in less-sheltered areas.

*Recommended plan of improvement.*—Provide improvement by dredging to a depth of 7 feet an area of 350 acres in the southern part of the bay, and dredging an entrance channel thereto, 200 feet wide and 7 feet deep, from deep water to the north.

*Estimated cost (price level January 1961).*—

Federal.....	\$2, 185, 000
Non-Federal.....	2, 185, 000
Total.....	4, 370, 000

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$79, 600	\$101, 700	\$181, 300
Maintenance.....	44, 000		44, 000
Navigation aids.....	200		200
Total.....	123, 800	101, 700	225, 500
<b>Annual benefits:</b>			
Recreational benefits.....			294, 000
Reduction of damages.....			10, 000
Total.....			404, 000

*Benefit-cost ratio.*—1.8.

*Local cooperation.*—Contribute in cash 50 percent of the first cost of construction due to recreational boating benefits, presently estimated at \$2,185,000, to be paid in a lump sum prior to initiation of construction; provide, without cost to the United States, all lands, easements, and rights-of-way required for construction of the project; hold and save the United States free from damages; provide and maintain, without cost to the United States, necessary mooring facilities and utilities, including public landings with suitable supply facilities and public parking areas open to all on equal terms; and establish a competent and properly constituted public body to regulate the harbor facilities, open to all on equal terms. The city of New York has indicated willingness and ability to meet the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Health, Education, and Welfare.—Favorable.

State of New York: Favorable.



*Comments of the Bureau of the Budget:* No objection.

*Remarks.*—This area is concerned primarily with recreational boating. There are about 200,000 recreational craft located on Long Island Sound during the boating season. About 750 boats are based in Little Neck Bay, despite the present depth limitations. With an improved anchorage, it is estimated that the number of boats in the bay will double in a few years. If completed in time, the proposed anchorage would be available for visitors to the New York World's Fair which will be located about 6 miles away. The city of New York has indicated willingness to contribute 50 percent of the cost. This allocation of cost appears equitable because of the local benefits from the recreational benefits.

#### FLUSHING BAY AND CREEK, N.Y.

(H. Doc. 551, 87th Cong.)

*Location.*—Flushing Bay is on the north shore of Long Island, opening into the East River, 12 miles northeast of the Battery.

*Authority.*—Resolution by the Committee on Public Works of the House of Representatives, United States, adopted on June 7, 1961.

*Existing project.*—Provides for a channel 12 feet deep from East River through Flushing Bay and in Flushing Creek to Main Street Bridge with widths varying from 160 to 200 feet; a branch channel 12 feet deep and 200 feet wide from the bay channel to a maneuvering area of the same depth outside the municipal boat basin at the south end of the bay, with an anchorage basin 8 feet deep and approximately 700 feet wide west of the branch channel; and for the repair and reconstruction of 3,739 feet of dike. The work remaining to be done under the existing project consists of deepening the channel in the creek to 12 feet and the repair and reconstruction of the dike.

*Navigation problem.*—Existing project is inadequate for existing and prospective recreational craft, excursion boats, and commercial barge traffic.

*Recommended plan of improvement.*—Provides for: a bay channel 15 feet deep and 300 feet wide from deep water in East River to the maneuvering area, a distance of 1.8 miles; a creek channel 15 feet deep and 200 feet wide to 170 feet at a point 50 feet downstream of the proposed Van Wyck Expressway Bridge, a distance of about 1.1 miles; a branch channel 15 feet deep and 200 feet wide from the bay channel about 0.1 mile to the maneuvering area; an irregularly shaped maneuvering area 2,000 feet by 750 feet with a depth of 15 feet, except the approach to the west side of the municipal boat basin which would remain at 12 feet deep; an anchorage basin about 2,100 feet by 1,800 feet with a depth of 6 feet; a steel sheet-pile breakwater on the east side of the anchorage, west of the remains of the existing dike, 1,400 feet long with a top elevation of 15 feet; abandonment of the portion of the creek channel of the existing project from Van Wyck Expressway Bridge to the Main Street Bridge, a distance of 0.3 mile; abandonment of the repair and reconstruction of the remainder of the existing dike; and completion of the existing project primarily in the creek channel to authorized depth of 12 feet. The uncompleted part of the work authorized in 1925 is recommended be combined with the additional work recommended herein and the whole be treated as a single item.

*Estimated cost (price level of January 1962).—*

	Existing project	Modification	Total
Federal.....	\$622,000	<sup>1</sup> \$1,695,000	\$2,317,000
Non-Federal.....	295,000	2,189,000	2,484,000
Total.....	917,000	3,884,000	4,801,000

<sup>1</sup> Amount of additional authorization required.

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$85,000	\$115,700	\$200,700
Maintenance.....	54,100	2,000	56,100
Total.....	139,100	117,700	256,800
Annual benefits:			
Transportation savings.....			211,200
Recreational boating.....			625,800
Harbor of refuge.....			5,000
Total.....			842,000

*Benefit-cost ratio.—3.3.*

*Local cooperation.*—Provides that: prior to construction local interests contribute 50 percent of the first cost of construction for widening the bay channel from 200 to 300 feet, a distance of 1.8 miles, for dredging the recreational anchorage and for constructing the breakwater, presently estimated at \$1,154,000, the final amount to be determined after final costs are known; and provided that prior to construction local interests agree to: provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and for aids to navigation upon the request of the Chief of Engineers; hold and save the United States free from damages that may result from the construction and maintenance of the improvement; provide and maintain without cost to the United States adequate approach channels and berths and modify existing facilities at the terminals which would permit use of the waterway to secure full advantage of the deeper channel; accomplish without cost to the United States removal or relocation of pipelines, cables, and other utilities, and all necessary protective measures to bridges and other structures adjacent to or crossing the waterway; provide and maintain without cost to the United States necessary mooring facilities and utilities for recreational boating including public landings with suitable supply facilities and public automobile parking areas open to all on equal terms; and assign to a competent and properly constituted public body the power to regulate the use, growth, and free development of the waterway facilities with the understanding that said facilities will be open to all on equal terms. Local interests have indicated willingness and ability to furnish local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

State of New York: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—Channels of the existing project have insufficient depths for commercial vessels and recreational craft, and they are exposed to high waves, and additional space is needed for use of prospective navigation. The recommended improvement will provide an adequate channel, maneuvering area and anchorage, and a breakwater for protection from high winds and tides. It would eliminate tidal delays, provide additional anchorage areas for recreational boats, and provide a harbor of refuge in this area. This anchorage would be available to accommodate the visitors to the New York World's Fair being constructed adjacent to the site. The committee notes the large amount of local contribution required due to recreational boating benefits, and the utility relocations. The project has a very favorable economic ratio.

#### BUTTERMILK CHANNEL, N.Y.

(H. Doc. 483, 87th Cong.)

*Location.*—Buttermilk Channel is part of the New York Harbor joining Red Hook and Bay Ridge Channels to form a continuous deep-draft waterway along the Brooklyn waterfront.

*Authority.*—House Public Works Committee resolution adopted August 20, 1957.

*Existing project.*—The existing Federal project for Buttermilk Channel provides for a 40-foot channel over the easterly half and a 35-foot channel over the westerly half, for suitable widening at the junctions with East River and Red Hook and Anchorage Channels. Private and municipal interests have made intensive terminal and industrial improvements along the Brooklyn waterfront.

*Navigation problem.*—Navigation is unsafe and time consuming and widening is needed to alleviate difficult turns vessels must now make.

*Recommended plan of improvement.*—Provides for minimum clear width of 2,100 feet at the junction of Buttermilk Channel with Anchorage and Red Hook Channels; dredging to a project depth of 35 feet a triangular area on the north side of the Buttermilk Channel and an irregular area on the south side.

*Estimated cost (price level of July 1960).*—All Federal, \$2,226,000.

*Project economics.*—

Annual charges (all Federal):

Interest and amortization.....	\$81, 000
Maintenance.....	17, 000
Total.....	98, 000

Annual benefits:

Damages prevented to vessels.....	12, 000
Savings in transportation.....	230, 000
Total.....	242, 000

*Benefit-cost ratio.*—2.5.

*Local cooperation:* None required.

*Comments of the State and Federal agencies.*—

Department of Interior: Favorable.

State of New York: Favorable.



*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee notes that about 9 million tons of commerce pass through the junctions of Buttermilk Anchorage and Red Hook Channels annually. Congestion causes considerable delays, and serious accidents attributable to such congestion occur frequently. There is no local cooperation required as dredging will be undertaken in areas remote from the piers and disposal areas are not needed. The project has a high benefit-cost ratio, and the committee believes the improvement is needed to care for the commerce in New York Harbor, one of the major ports of our Nation.

#### RARITAN RIVER, N.J.

(H. Doc. 455, 86th Cong.)

*Location.*—Raritan River is formed by the junction of its north and south branches about 18 miles above New Brunswick, N.J., flows generally southeastward 30 miles to Raritan Bay, which is about 25 miles southwest of the Battery, New York City.

*Authority.*—Resolution, Committee on Rivers and Harbors, House of Representatives, adopted November 1945.

*Existing project.*—Provides for a depth of 25 feet and 300 feet wide in the main channel, together with various widths and depths to the Delaware and Raritan Canal entrance at New Brunswick; and a depth of 25 feet deep and 300 feet wide, together with varying widths and depths to the upper junction with the main channel at Crab Island.

*Navigation problem.*—Local interests desire the reconsideration of the item of local cooperation under the existing project regarding spoil disposal areas. They indicate that there has been a rapid decrease in available areas for that purpose.

*Recommended plan of improvement.*—Modification of the existing project for Raritan River, N.J., to provide for maintaining the South Channel to a depth of 15 feet from the upper limit of the 25-foot project to the dock of the Middlesex County Sewerage Authority, a distance of 2,200 feet.

*Estimated cost (price level of January 1959).*—Federal, maintenance only; non-Federal, none.

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$280	\$640	\$920
Maintenance.....	30,000	14,000	44,000
Total.....	30,280	14,640	44,920
Annual benefits: Transportation savings.....			180,200

*Benefit-cost ratio.*—4.

*Local cooperation.*—In addition to meeting requirements of local cooperation for the existing project; furnish spoil-disposal areas and necessary dikes, bulkheads, and embankments therefor, required for maintenance of the improvement when and as required; and hold and save the United States free from damages due to maintenance of the

improvement. Local interests have indicated willingness and ability to meet requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of New Jersey: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—This channel was originally dug by the Middlesex County Sewage Authority, a local public agency. No Federal funds were involved. The project benefits a large densely populated and industrial area. Federal assumption of maintenance of the south channel is considered proper and justified in view of the use of this channel for general navigation. The economic ratio is very favorable.

#### LYNNHAVEN INLET, BAY, AND CONNECTING WATERS, VIRGINIA

(H. Doc. 580, 87th Cong.)

*Location.*—On the south shore of Chesapeake Bay, 5 miles west of Cape Henry, and 10 miles east of Norfolk, Va.

*Authority.*—Rivers and Harbors Act of 1945.

*Existing project.*—No Federal navigation project.

*Navigation problem.*—There is a need to improve the entrance and inner channels to accommodate existing and prospective commercial and recreational craft.

*Recommended plan of improvement.*—An entrance channel from Chesapeake Bay through Lynnhaven Inlet, 10 feet deep, 150 feet wide, and approximately 3,500 feet long; a mooring and turning basin in Lynnhaven Bay, 10 feet deep, 1,100 feet long, and 750 feet wide; a channel 9 feet deep, 90 feet wide, and approximately 10,000 feet long from the mooring and turning basin to Broad Bay via the Long Creek-Broad Bay Canal; and a channel through the narrows, 6 feet deep, 90 feet wide, and approximately 2,000 feet long.

*Estimated cost (price level of January 1962).*—

Federal.....	\$1, 147, 000
Non-Federal.....	312, 000
Total.....	1, 459, 000

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$52, 000	\$19, 800	\$71, 800
Maintenance.....	61, 500	2, 000	63, 500
Total.....	113, 500	21, 800	135, 300
<b>Annual benefits:</b>			
Increased oyster production.....			103, 000
Commercial boating.....			21, 400
Recreational boating.....			72, 200
Total.....			196, 600

*Benefit-cost ratio*—1.5.

*Local cooperation.*—Contribute, in cash, 15 percent of the first cost of construction, such contribution presently estimated at \$203,000, to be paid in a lump sum prior to initiation of construction, subject to



final adjustment after actual costs have been determined; provide, without cost to the United States, all lands, easements, and rights-of-way required for construction and subsequent maintenance of the improvements and of aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; hold and save the United States free from property damages, including shellfish interests, that may result from construction and subsequent maintenance of the project; secure releases for damages from shellfish interests to permit the Corps of Engineers to accomplish the initial dredging and the subsequent maintenance of the project, when and as required; provide and maintain, without cost to the United States, a marina for the use of recreational and sport-fishing craft, such facilities to include at least 400 feet of berthing space with adequate shore and water access thereto, and with such services as may be required for full utilization of the improvement by the public on equal terms; provide and maintain, without cost to the United States, a public terminal for commercial vessels, including those operated by commercial fisherman, oystermen, clammers, and crabbers, such facilities to include at least 300 feet of berthing space with adequate shore and water access thereto, and with such services as may be required for full utilization of the improvement by the public on equal terms; assure the control of pollution in the waters of Lynnhaven Bay and its eastern and western branches, Long Creek, Broad Bay, and Linkhorn Bay; and establish a competent and properly constituted public body empowered to regulate the use, growth, and free development of the harbor facilities with the understanding that said facilities will be open to all on equal terms.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Commonwealth of Virginia: Favorable.

*Comments of the Bureau of the Budget.—*No objection to submission of the report to Congress. However, due to the lack of policy clarification concerning principles to be developed on the basis of overall review of bridge replacement and clearance problems, the Bureau recommends, without prejudice to reconsideration in the light of further policy clarification, that the proposed net cost of the Federal Government be reduced by \$79,000.

*Remarks.—*Lynnhaven Bay and its tributaries connects with Chesapeake Bay, and other inland bays and waters. This area produces oysters, crabs, clams, and fish. The inlet is used by commercial boats and recreational craft. Improved channels will prove beneficial to navigation and increase tidal flows to foster optimum shellfish growth. The allocation of costs are considered equitable because of benefits that would accrue to recreational boating. The economic ratio is favorable. The committee is aware that an infectious organism has recently caused high mortality to oysters in the lower Chesapeake Bay area, and could cause a decrease in propagation of shellfish. Increased tidal ranges in Broad Bay should benefit shellfish however, Although local interests knew of the clearances required by this proposed project, and constructed the bridge at the clearance, the committee does not believe that local interests should be reimbursed for



work done prior to authorization of the project. Credit to local interests for the increased cost of \$79,000 is not allowed. The revised estimated Federal cost is \$1,068,000 and the non-Federal cost is \$391,000.

#### JAMES RIVER, VA.

(H. Doc. 586, 87th Cong.)

*Location.*—James River rises near Clifton Forge, Va., and flows 340 miles southeast to Hampton Roads at Newport News, Va. The head of commercial navigation is at Richmond, about 91 miles above the mouth.

*Authority.*—Resolutions of the Committees on Public Works of the U.S. Senate and House of Representatives, adopted on August 13, 1954, and March 30, 1955, respectively.

*Existing project.*—The existing project for James River, completed in 1947, provides for a channel 25 feet deep and 300 feet wide from the mouth to Hopewell, a distance of 69.2 miles; then 25 feet deep and 200 feet wide, including three cutoffs, to Deep Water Terminal at Richmond, a distance of 17.2 miles; thence a channel 18 feet deep and 200 feet wide to the Richmond lock, a distance of 4.4 miles; removal of an obstruction in the upper harbor; a turning basin 18 feet deep, 200 feet wide, and 600 feet long in the upper harbor; and maintenance of a turning basin 25 feet deep, 200 to 700 feet wide, and 5,200 feet long near Deep Water Terminal. Local interests have performed maintenance dredging in the upper harbor and have dredged approach and berthing areas at various terminals at Richmond and Hopewell.

*Navigation problems.*—Sharp bends, narrow widths, and inadequate depths preclude full utilization of the channel by deep-draft commercial traffic. The desired improvements would permit realization of transportation savings, promote industrial development in the area, and lessen navigation hazards and delays.

*Recommended plan of improvement.*—Provides for a channel 35 feet deep and 300 feet wide from deep water in Hampton Roads to Deep Water Terminal at Richmond, with easing of bends to a minimum radius of 3,000 feet supplemented by benching at Jones Neck to improve the sight distance; a mooring basin 35 feet deep, 180 to 220 feet wide, and 2,000 feet long alongside the channel opposite the waterfront at Hopewell; and enlargement of the turning basin at Richmond Deep Water Terminal to a width of 825 feet and a length of 2,770 feet, at a depth of 35 feet; and that, should the improvements be authorized by Congress, the authorization shall expire after a period of 5 years from the date of enactment, unless the Governor of Virginia has endorsed the modified project within that time.

*Estimated cost (price level of January 1962).*—

Federal.....	\$39, 000, 000
Non-Federal.....	1, 829, 000
Total.....	40, 829, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$1, 516, 400	\$105, 200	\$1, 621, 600
Increased maintenance.....	252, 000	80, 200	332, 200
Estimated net average loss of marketable oysters.....		12, 500	12, 500
Total.....	1, 768, 400	197, 900	1, 966, 300
Annual benefits: Transportation savings.....			2, 551, 000

*Benefit-cost ratio.—1.3.*

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the improvements and for aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil, and necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; hold and save the United States free from damages that may result from construction and subsequent maintenance of the improvements, including damages to public or private oyster and clam grounds, and damages resulting from any change in the natural course of the James River, from blasting operations during removal of rock, or from changes in ground-water levels; hold and save the United States free from claims for costs resulting from the provision and operation of bridges or ferries that may be required between the mainland and any islands created by channel cutoffs; accomplish without cost to the United States such alterations or relocations as required by the Chief of Engineers in roads, bridges, waterfront structures, sewer, water supply, storm drainage, electric power, and other utility facilities; provide, maintain, and operate at local expense adequate terminal and transfer facilities to accommodate foreign and domestic commerce expected to develop from the improved channel, in accordance with plans approved by the Chief of Engineers; and when and where necessary, provide and maintain at local expense depths in berthing and mooring areas adjacent to terminals commensurate with the related project depth. Local interests are willing and able to furnish items of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: Objects to submission of a favorable report on James River, Va., until such time as the Governor, upon recommendation of the commission of fisheries, signifies his approval and the fisheries can be adequately protected.

Department of Commerce: Favorable.

State of Virginia: Favorable.

*Comments of the Bureau of the Budget.*—No objection to submission of the report to Congress subject to certain views. The Bureau of the Budget believes that authorization of the project would be premature in advance of more adequate resolution of questions concerning its impact on seed oyster production and a more conclusive determination of the position of the State of Virginia with respect to the project. Accordingly, it recommends that consideration be given to



the desirability of deferring transmittal of the report to the Congress until these matters are more fully resolved. Additionally, the Bureau considers that at such time as the project is forwarded to the Congress reasonable estimates of probable negative benefits from the adverse effect on seed oyster production should be incorporated in the economic evaluation of the project.

*NOTE.*—In view of the provisions of an act approved by the Virginia General Assembly on March 12, 1958, prohibiting further improvement of the James River between the bridge and Jamestown, about 28 miles upstream, unless approved by the Governor upon the recommendation of the commission of fisheries, a recommendation of the report provides that should the improvement be authorized by Congress, the authorization shall expire after a period of 5 years from the date of enactment, unless the Governor of Virginia has endorsed the modified project within that time.

*Remarks.*—The committee notes that the proposed improvement for the James River will permit economical transportation of petroleum products and other bulk commodities utilizing the ports of Hopewell and Richmond. Increased depths of 35 feet to Richmond is believed necessary and is amply justified. However, the committee considers that prior to construction that a feasibility report should be submitted to Congress which takes account of possible adverse effects of the project on seed oyster production.

ROLLINSON CHANNEL AND CHANNEL FROM HATTERAS INLET  
TO HATTERAS, N.C.

(H. Doc. 457, 87th Cong.)

*Location.*—Hatteras, N.C., is on the Pamlico Sound side of the barrier beach, about 4 miles northeast of Hatteras Inlet. The inlet is a natural opening through the barrier beach about 13 miles southwest of Cape Hatteras, N.C.

*Authority.*—Resolutions of Public Works Committee, U.S. House of Representatives, adopted July 29, 1955, July 31, 1957, and July 16, 1958.

*Existing project.*—Provides for a channel 100 feet wide and 6 feet deep from that depth in Pamlico Sound to and including a basin of the same depth at Hatteras, and rubble-mound breakwaters at harbor entrance.

*Navigation problem.*—Present channels are inadequate for vessels now serving Hatteras Harbor and if channels were improved the larger fishing vessels could use the harbor as a permanent or temporary base of operations. A harbor of refuge in the vicinity is also needed.

*Recommended plan of improvement.*—Provides for deepening Rollinson Channel to 12 feet over its present 100-foot width; deepening the existing Hatteras Harbor to 12 feet; and a channel 10 feet deep and 100 feet wide from Hatteras Inlet Gorge to Hatteras, N.C.



*Estimated cost (price level of June 1960).—*

	Rollinson Channel	Channel from Hatteras Inlet to Hat- teras, N.C.	Total
Federal.....	\$416,000	\$236,000	\$652,000
Non-Federal.....	8,000	8,000	16,000
Total.....	424,000	244,000	668,000

*Project economics.—*

	Rollinson Channel	Channel from Hatteras Inlet to Hat- teras, N.C.	Total
Annual charges:			
Federal:			
Interest and amortization.....	\$15,300	\$8,900	\$24,200
Operation and maintenance.....	9,000	13,000	22,000
Navigation aids.....	200	100	300
Total.....	24,500	22,000	46,500
Non-Federal:			
Interest and amortization.....	370	370	740
Replacement and maintenance.....	1,130	1,130	2,260
Total.....	1,500	1,500	3,000
Grand total.....	26,000	23,500	49,500
Annual benefits:			
Transportation savings.....	16,800	21,500	38,300
Reduction in damages.....	10,500	3,900	14,400
Increased catch.....		7,100	7,100
Total.....	27,300	32,500	59,800
Benefit-cost ratio.....	1.05	1.4	1.2

*Local cooperation.*—Furnish lands and rights-of-way, also bulkheads and embankments for spoil area, if needed; hold and save the United States free from damages; provide and maintain public terminal and transfer facilities. Local interests are willing to comply with the requirements of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of North Carolina: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.*—The committee notes the marginal benefit-cost ratio for the Rollinson Channel. While the small communities in this area are scattered, they are important as ports of call for fishing vessels, and Hatteras serves as a distribution center for petroleum products for Hatteras Island. The committee considers the recommended improvements for navigation are urgently needed to serve this offshore area of North Carolina.

## WILMINGTON HARBOR, N.C.

(S. Doc. 114, 87th Cong.)

*Location.*—Wilmington Harbor, serving the port of Wilmington, is located in the lower reaches of the Cape Fear River along the southern part of the Atlantic coast of North Carolina.

*Authority.*—Senate Public Works Committee resolution adopted April 18, 1957.

*Existing project.*—The applicable portion of the Wilmington Harbor project under this investigation consists of a ship channel 35 feet deep and 400 feet wide across the ocean bar, then 34 feet deep and 400 feet wide to the upper end of the anchorage area at Castle Street, Wilmington.

*Navigation problem.*—Local interests desire a deeper and wider channel in the main channel of Wilmington Harbor for larger petroleum vessels.

*Recommended plan of improvement.*—The recommended modification of the existing project for Wilmington Harbor, N.C., would provide a channel 40 feet deep and 500 feet wide through the ocean bar to Southport, N.C., thence 38 feet deep over the existing 400-foot width in the channel to Castle Street and deepening the existing turning basin to the same depth; and that dredging shall not be done by the United States within 50 feet of any pierhead line, wharf, or structure.

*Estimated cost (price level of June 1960).*—

Federal.....	\$6, 370, 000
Non-Federal.....	100, 000
Total.....	6, 470, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$231, 000	\$5, 000	\$236, 000
Maintenance and operation in addition to that now required.....	10, 000	10, 000	10, 000
Maintenance of spoil areas.....		15, 000	15, 000
Total.....	241, 000	20, 000	261, 000
Annual benefits: Transportation savings for petroleum products.....			440, 000

*Benefit-cost ratio.*—1.7.

*Local cooperation.*—Local interests are required to provide all lands, easements, and rights-of-way including spoil areas and necessary retaining dikes; hold and save the United States free from damages. The State of North Carolina stated it would fulfill all items of local cooperation that local government agencies are unable to meet.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

State of North Carolina: No objection.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—Wilmington has a population of about 40,000, and Wilmington Harbor serves as a major distribution center for a large area in North and South Carolina. Total commerce amounts to almost 5

million tons, about 60 percent of which is petroleum products. While bulk fertilizers and dry cargoes move in this channel, the increased depth is primarily to accommodate the use of modern deep-draft tankers, and the benefits are computed on the annual transportation savings on petroleum products. The benefit-cost ratio is 1.7 and the project is believed amply justified.

#### SAVANNAH HARBOR, GA., TURNING BASIN

(S. Doc. 115, 87th Cong.)

*Location.*—Savannah Harbor, located on the Atlantic coast at Savannah, Ga., comprises the lower 31 miles of Savannah River and estuary.

*Authority.*—Senate Public Works Committee resolution adopted December 3, 1958.

*Existing project.*—The existing project provides for an entrance channel 36 feet deep by 500 feet wide across the ocean bar for 9.7 miles; then 34 feet deep and varying 550 to 400 feet for 18.9 miles with two turning basins 34 feet deep and than a channel 30 feet deep and 200 feet wide for 2.4 miles with two turning basins 30 feet deep.

*Navigation problem.*—Local interests desire enlargement of the turning basin at Kings Island.

*Recommended plan of improvement.*—The plan of improvement provides for modification of the Savannah Harbor project to enlarge the turning basin near Kings Island to a width of 900 feet and a length of 1,000 feet.

*Estimated cost (price level 1961).*—

Federal.....	\$605, 000
Non-Federal.....	78, 500
Total.....	683, 500

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	22,000	3,500	25,500
Maintenance and operation in addition to that now required.....	5,000	2,500	7,500
Total.....	27,000	6,000	33,000
Annual benefits: Transportation savings.....			40,235

*Benefit-cost ratio.*—1.22.

*Local cooperation.*—Provide all lands, easements and rights-of-way for construction and maintenance including spoil areas and dikes; hold and save the United States free from damage; and provide terminal facilities. Chatham County, Ga., Board of Commissioners will act as local assurer in meeting the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Georgia: Favorable.

*Comments of the Bureau of the Budget.*—No objection.



*Remarks.*—The port of Savannah handles commerce in excess of 4 million tons annually. There are over 200 manufacturing industries located in the Savannah area, including petroleum, asphalt, roofing, chemicals, fertilizers, and paper. Enlargement of the Kings Island turning basin will permit its utilization at all stages of the tide by the larger vessels now calling at this port. The project has a favorable economic ratio, and the committee recommends its approval.

#### CANAVERAL HARBOR, FLA.

(S. Doc. 140, 87th Cong.)

*Location.*—Canaveral Harbor, at Cape Canaveral, Fla., is located on the Atlantic coast about midway of the peninsula and about 145 miles south of Jacksonville.

*Authority.*—Senate Public Works Committee resolution, adopted April 26, 1951.

*Existing project.*—The authorized Canaveral Harbor project provides for an entrance channel 27 feet deep and 300 feet wide extending from the ocean between jetties to a turning basin 1,000 feet by about 1,900 feet to the same depth, inclosed by a turning basin with a navigation lock and then a barge canal 8 feet deep by 100 feet wide and about 8 miles in length to the Intracoastal Waterway.

*Navigation problem.*—The main ship canal was enlarged with Federal military funds in 1956-57 and 1961 to provide an entrance channel 37 by 400 to 300 feet wide over the ocean bar, then 36 feet by 300 feet through the barrier island with a turning basin 35 feet deep. Local interests desire maintenance of this work.

*Recommended plan of improvement.*—The plan of improvement provides for the maintenance of the main ship channel 37 feet deep by 400 feet wide, then 36 feet deep and 300 feet wide to the turning basin 35 feet deep, 2,000 feet long and width from 900 to 2,900 feet by conventional dredging and a sand transfer plant; relocation of the perimeter dike and provision of a channel 31 feet deep by 400 feet wide and additional turning basin 31 feet deep; enlargement of the channel to the Intracoastal Waterway to 12 feet deep by 125 feet wide; construction of the authorized lock 56 feet wide by 400 feet long in the relocated dike; elimination of the local requirement for the project for dockside citrus-packing, precooling facilities and railroad connections; and a Federal contribution to the cost of the highway and bridge, 65.3 percent and 51.2 percent, respectively.

*Estimated cost (price level of March 1960).*—

Federal	-----	\$5, 076, 000
Non-Federal	-----	882, 000
Total	-----	5, 958, 000

*Project economics (overall plan).—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$303,000	\$20,000	\$323,000
Maintenance and operation.....	247,000	43,000	290,000
Aids to navigation.....	4,000		4,000
Total .....	554,000	63,000	617,000
Annual benefits:			
Transportation savings .....			680,700
Beach erosion damage prevented.....			342,000
Recreational boating.....			56,500
Total .....			1,079,000

*Benefit-cost ratio.—1.8.*

*Local cooperation.*—Provide lands, easements, and rights-of-way; hold and save the United States from claims for damage including erosion of ocean shore; provide, operate, and maintain four-lane highway bridge and roadway on relocated dike subject to Federal contributions of \$810,000; provide terminals; and provide alterations in utilities and berthing facilities. Canaveral Port Authority representatives stated it would be willing and able to comply with local requirements.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Navy: Favorable.

National Aeronautics and Space Administration: Favorable.

The Space Administration requests that the width of the authorized navigation lock be increased from 56 feet to 90 feet to serve waterborne missile transportation requirements. The corps recognizes their need; however, the corps believes that the cost of military or defense work in connection with river and harbor projects should be assigned to applicable function.

State of Florida: Favorable.

*Comments of the Bureau of the Budget.*—The bureau of the Budget advises that there would be no objection to the submission of the report to Congress. However, the Budget states that the National Aeronautics and Space Administration has requested that the width of the barge lock be increased from the planned 56 feet to 90 feet. It is the understanding of the Bureau of the Budget that this enlargement is proposed to be borne by NASA appropriations, and it is further understood that authorization therefor will be sought by NASA.

*Remarks.*—Canaveral Harbor is an important port for defense and space exploration purposes. The tributary area to the port has a population of about 600,000, and includes industries for bulk production of orange juice, portland cement, electric power generation, and guided missile activities. Military terminals occupy the north and east sides of the present turning basin, and part of the south side. Public terminals on the south side provide bulk storage for petroleum and orange juice. The proposed improvements will provide space for future growth of the port and permit operation of more efficient deeper draft vessels. The assumption of Federal maintenance of the main ship channel appears justifiable. The Federal contribution to the new highway bridge is believed equitable. Assignment of the cost of the



increased size for the navigation lock to the Space Administration appears reasonable, as the main ship channel was deepened with military funds. The project is well justified, and believed necessary because of the important Federal activities in the area.

#### KEY WEST HARBOR, FLA.

(S. Dos. 106, 87th Cong.)

*Location.*—Key West is an island off the southern tip of Florida, 130 miles southwest of Miami and 230 miles south of Tampa, Fla.

*Authority.*—Resolution of Public Works Committee, U.S. Senate, adopted March 15, 1951.

*Existing project.*—Provides for a channel 300 feet wide and 30 feet deep, about 6.8 miles, from Key West to deep water to the south; widening of the channel opposite wharves to a width of 800 feet and a depth of 26 feet; and a channel 17 feet deep and of sufficient width for navigation, about 10.4 miles, from Key West to the northwest, with jetties at the northwest entrance. In 1942-43, the U.S. Navy extended the 30-foot channel to a deepwater basin at the Key West Naval Operating Base.

*Navigation problems.*—Present channel inadequate for shrimp fleet and protection is needed for the fleet from damaging waves.

*Recommended plan of improvement.*—Provides for a channel 12 feet deep and 150 feet from the 30-foot ship channel to Key West, a distance of about 3,000 feet; an irregularly shaped turning basin in the bight of the same depth; and a granite-mound breakwater 800 feet long along the north side of the bight.

#### *Estimated cost (price level, June 1961)—*

Federal.....	\$820, 000
Non-Federal.....	23, 500
Total.....	843, 500

#### *Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$30, 200	\$800	\$31, 000
Increased maintenance.....	3, 500		3, 500
Aids to navigation.....	800		800
Economic loss for lands.....		800	800
Total.....	34, 500	1, 600	36, 100
Annual benefits: Reduction in damages and savings in operation time.....			52, 000

#### *Benefit-cost ratio.—1.4.*

*Local cooperation.*—Furnish lands and rights-of-way, also spoil disposal areas and retaining dikes; hold and save the United States free from damages; provide and maintain public terminal and transfer facilities; and provide and maintain depths in berthing areas commensurate with related project depths. Local interests are willing to comply with the requirements of local cooperation.

#### *Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of the Navy: Favorable.

State of Florida: Favorable.



*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee is aware that the shrimp fleet consists primarily of migratory boats which use Key West as a base during the shrimp season, between November and June. The present depths are inadequate and the groundings of the shrimp boats causes damages and delays. The recommended improvements appear justified, and it is believed operating expense will be reduced, larger boats can be used, and the fish and shrimp catch will be increased.

PORT SUTTON AND YBOR CHANNEL, TAMPA HARBOR, FLA.

(H. Doc. 529, 87th Cong.)

*Location.*—Tampa Harbor serves the city of Tampa located on the west coast about midway of the Florida Peninsula. Port Sutton Channel and Ybor Channel are branch channels in the northerly section of the harbor.

*Authority.*—Resolutions of the Senate Public Works Committee adopted November 18, 1958, and January 5, 1959, and two resolutions of the House of Representatives adopted on April 15, 1959.

*Existing project.*—Existing Tampa project features pertinent to this report include channels from the Gulf of Mexico to Tampa, 36 feet deep by 600 feet wide at the entrance, then 34 feet deep over a 500-foot width in Mullet Key Cut and over a 400-foot width in Tampa and Hillsborough Bays to Ybor Basin; turning basins 34 feet deep at Ybor Channel entrance and channels 30 feet deep over widths of 480 and 500 feet in Ybor Channel.

*Navigation problem.*—Local interests dredged a channel at Port Sutton, in 1955, 150 feet wide and a turning basin 500 feet by 1,300 feet to a depth of 30 feet. They desire that this work be incorporated in the authorized Tampa Harbor project for maintenance. Local interests also desire deepening Ybor Channel from 30 to 34 feet.

*Recommended plan of improvement.*—The plan of improvement provides for modification of the authorized Tampa Harbor project to include maintenance of Port Sutton Channel 150 feet wide and about 3,000 feet long and a turning basin 500 feet by 1,300 feet; and deepening Ybor Channel to a depth of 34 feet over a width reduced from 500 to 400 feet.

*Estimated cost.*—

	Ybor Channel	Port Sutton Channel
Federal.....		
Non-Federal.....	\$997,000	(1)
	18,000	
Total.....	1,015,000	

<sup>1</sup> Maintenance only.

*Project economics.*—

	Ybor Channel	Port Sutton Channel
Annual charges:		
Federal:		
Interest and amortization.....	\$36,600	\$1,500
Maintenance and operation (in addition to that now required).....	1,500	5,500
Additional navigation aids maintenance.....		1,500
Total Federal.....	38,100	8,500
Non-Federal.....	700	100
Total.....	38,800	8,600
Annual benefits:		
Transportation savings.....	117,000	266,000
Land filled by dredged material.....	4,000	
Elimination of terminal costs.....		20,000
Total.....	121,000	286,000
Benefit-cost ratio.....	3.1	33.2

*Local cooperation.*—Provide all lands, easements, and rights-of-way for dredging Ybor Channel and for maintenance of this channel and Port Sutton Channel and turning basin including spoil areas and necessary dikes; hold and save the United States free from damage; provide terminal facilities; provide depths in vessel berthing areas and local access channels commensurate with projects; contribute to Ybor Channel project 1.7 percent of construction dredging cost presently estimated at \$17,000. Hillsborough County Port Authority representatives stated that it would be willing and able to comply with these requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

State of Florida: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The city of Tampa had a population of 275,000 in 1960 and a tributary population of 1.4 million. It is a major distribution center for petroleum products, and also has phosphate mining and processing and citrus production in the area. Tourism is a major industry of the region. Federal maintenance of the Port Sutton Channel constructed by local interests appears reasonable. Increased depths in Ybor Channel will permit operation of more fully loaded and larger tankers in this channel. Deepening the Ybor Channel to the same depth as that in other channels in Tampa Harbor is believed equitable and fully justified. The benefit-cost ratio of these recommended improvements is outstanding.

WALTER F. GEORGE LOCK AND DAM, CHATTAHOOCHEE RIVER, GA. AND ALA.

(S. Doc. 109, 87th Cong.)

*Location.*—The Walter F. George lock and dam is located on the Chattahoochee River, near Fort Gaines, Ga.

*Authority.*—The authority for the preparation of this report is contained in provisions of the Fish and Wildlife Coordination Act, approved August 12, 1958. This act provides that fish and wildlife conservation shall receive equal consideration with other project fea-



tures of water resource development programs. In accordance with that act, construction agencies are required to coordinate their planning of water resource programs with the Fish and Wildlife Service during all phases of development.

*Existing project.*—The project is a major component of the plan of development of the Apalachicola River system for navigation and the production of hydroelectric power. The lock and dam is located at river mile 75.3 and will back water to Columbus, Ga., or river mile 160.4. The construction of the project is about 65 percent complete.

*Problem.*—The Chamber of Commerce, Eufaula, Ala., expressed an interest in the establishment of a national wildlife refuge on the Walter F. George Reservoir.

*Recommended plan of improvement.*—In accordance with the Fish and Wildlife Coordination Act, the Secretary of the Interior proposes to establish a national wildlife refuge for management of migratory waterfowl in conjunction with the Walter F. George project. Establishment of the proposed refuge would require the acquisition of fee title in place of easements on 453 acres within the present project boundary, and acquisition of fee title to 1,858 acres of additional land outside of the present project boundary.

*Estimated cost.*—

Federal.....	\$500, 000
Non-Federal.....	None
Total.....	500, 000

*Project economics.*—Annual charges, \$37,800; annual benefits, \$39,020.

*Benefit-cost ratio.*—1.03.

*Local cooperation.*—None.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget in its letter of June 5, 1962, commenting on the report of the Corps of Engineers concerning modification of the Walter F. George project, stated that it had asked the Department of the Interior to review its future plans for the migratory waterfowl program, including an appraisal of the role that refuge lands at water resources projects would play in the total program. The Budget further stated that in order to preserve the advantages of unified planning and financing of the migratory waterfowl refuge system within a single source of funds, consideration was being given to a procedure under which duck-stamp revenues would be used to repay the Treasury for general fund appropriations used in the prior fiscal year to acquire waterfowl lands at water resources projects. It was further stated by the Budget, that if the recommended modification of the Walter F. George lock and dam was authorized by the Congress, it may later be considered appropriate to finance the acquisition of lands outside project boundaries in this manner. With this understanding, the Budget advised that there would be no objection to the submission of the report to the Congress.

*Remarks.*—Establishment of wildlife refuges at water resources projects is believed desirable for conservation purposes, and to permit full development at our reservoir projects. The proposed improvement to establish a national wildlife refuge for management of migratory waterfowl at the existing Walter F. George Reservoir would require acquisition of additional land. While the economic ratio is



marginal, the purposes are worthy. The committee sees no objection to acquiring the land for this project from duck-stamp fund revenues, as suggested by the Bureau of the Budget, if appropriate procedures for this method of financing are developed.

#### PENSACOLA HARBOR, FLA.

(H. Doc. 528, 87th Cong.)

*Location.*—Pensacola Harbor is on the northwest coast of Florida, about 59 miles east of Mobile, Ala., and 103 miles west of Panama City, Fla.

*Authority.*—Resolutions of Rivers and Harbors Committee and Public Works Committee, U.S. House of Representatives, adopted November 20, 1945, and June 3, 1959, respectively; also River and Harbor Act approved March 2, 1945.

*Existing project.*—Provides for an entrance channel 32 feet by 500 feet, about 3.4 miles, from Gulf of Mexico to Pensacola Bay; two parallel approach channels each 30 feet by 250 feet by 3,700 feet, leading to opposite ends of Pensacola Harbor; an inner harbor channel 30 feet by 500 feet by 3,500 feet, parallel to the pierhead line; an approach channel 30 feet by 250 feet, about 1.2 miles, to the pierhead line opposite Muscogee wharf; and a channel 21 feet by 100 feet from Pensacola Bay to mouth of Bayou Chico, about 1 mile, thence 20 feet by 100 feet, about 4,400 feet terminating at a turning basin 20 feet by 500 feet by 500 feet. Present depths in Bayou Chico are 15 feet in outer channel and 14 feet in inner channel and turning basin. In 1958 and 1959 the entrance channel was enlarged to 37 feet by 800 feet, and an aircraft carrier mooring basin 35 feet deep, of about 1,200 acres, was dredged in lower Pensacola Bay at Navy expense. The Gulf Intercoastal Waterway, 12 feet by 125 feet, crosses the harbor entrance channel in the lower part of Pensacola Bay.

*Navigation problem.*—Controlling project depths and widths of existing channels place undue restriction on shipping and deprive Pensacola of a considerable amount of commerce that would otherwise move through the port. This situation is expected to become more critical in view of the trend toward construction and use of larger cargo vessels.

*Recommended plan of improvement.*—Provides for maintenance of entrance channel from gulf to Pensacola Bay, about 5 miles, to 35 feet deep and 500 feet wide; maintenance of a channel along south side of aircraft carrier mooring basin, about 2.5 miles, to 33 feet deep and 300 feet wide; a bay channel 33 feet deep, 300 feet wide and about 2.1 miles long; parallel approach channels to opposite ends of inner harbor channel about 1.3 and 1.4 miles long, each 33 feet deep and 300 feet wide, and flared at the junctions with the inner harbor channel; and deepening the existing 500-foot-wide inner harbor channel to a depth of 33 feet and lengthening it to 3,950 feet.

*Estimated cost (price level of October 1961).*—All Federal, \$424,000.

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$16,000		\$16,000
Increased maintenance.....	90,000		90,000
Maintenance of slips.....		\$1,000	1,000
<b>Total</b> .....	106,000	1,000	107,000
<b>Annual benefits:</b>			
Transportation savings.....			162,000
Maintenance savings to U.S. Navy.....			40,000
<b>Total</b> .....			202,000

*Benefit-cost ratio.*—1.9

*Local cooperation.*—Furnish lands and rights-of-way, also spoil disposal areas and retaining dikes; provide and maintain public terminal and transfer facilities; provide and maintain depths in berthing areas and local access channels serving the terminals commensurate with depths provided in the related project areas; and hold and save the United States free from damages. Local interests are willing to comply with the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objections.

Department of the Navy: No objections.

State of Florida: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee was advised that the inadequate depths and widths of existing channels in Pensacola Harbor are restrictive to its use, and will become more critical as larger cargo vessels are placed in operation. The area tributary to the port comprises parts of northwestern Florida and southern Alabama, with a population of about 200,000, but the area is limited by the competitive influence of neighboring deepwater ports. Local representatives feel that deeper channels and maneuvering areas will attract commerce that is now moved through more distant ports. The committee believes that the recommended improvements will provide adequate channels for larger cargo vessels now in use, are justified by the prospective benefits, and the recommended requirements of local cooperation are appropriate. Maintenance of the facilities required only by the Navy on a reimbursable basis is believed advisable.

## PASCAGOULA HARBOR, MISS.

(H. Doc 560, 87th Cong.)

*Location.*—On Mississippi Sound, in Jackson County, Miss., 32 miles west of the entrance to Mobile Bay, Ala.

*Authority.*—Senate Public Works Committee resolution, August 21, 1961; House Public Works Committee resolution, August 24, 1961.

*Existing project.*—A channel 38 feet deep and 325 feet wide across the outer bar at Horn Island Pass, thence 33 feet deep and 275 feet wide across Mississippi Sound and up Pascagoula River to a turning basin of the same depth having a maximum width of 950 feet and a length of about 2,000 feet on the west side of the channel just below the rail-



road bridge, thence 22 feet deep and 150 feet wide up Pascagoula and Dog Rivers to Highway 63 bridge over Dog River, thence 12 feet deep and 125 feet wide, via a cutoff channel through Robertson and Bounds Lakes to mile 6 on Dog River. The River and Harbor Act approved September 3, 1954, authorized modification of the existing project in accordance with plans on file in the Office, Chief of Engineers.

*Navigation problem.*—Insufficient depths limits the drafts of vessels calling at the port and the situation is expected to become more critical in view of the trend toward the use of larger vessels for grain and oil transport.

*Recommended plan of improvement.*—Pascagoula Harbor, as modified, would have an entrance channel 40 feet deep and 350 feet wide from deep water in the Gulf of Mexico through Horn Island Pass, including an impounding area for littoral drift 40 feet deep, 200 feet wide, and about 1,500 feet long adjacent to the channel at the west end of Petit Bois Island; a channel 38 feet deep and 350 feet wide in Mississippi Sound and Pascagoula River to the railroad bridge at Pascagoula, including a turning basin 2,000 feet long and 950 feet wide (including the channel area) on the west side of the river below the railroad bridge; and a channel 38 feet deep and 225 feet wide from the ship channel in Mississippi Sound to the mouth of Bayou Casotte, thence 38 feet deep and 300 feet wide for about 1 mile to a turning basin 38 feet deep, 1,000 feet wide, and 1,750 feet long. No dredging shall be done by the United States within 50 feet of any established harbor line, wharf, or other structure.

*Estimated cost (price level of June 1962).*—

Federal.....	<sup>1</sup> \$4, 870, 000
Non-Federal.....	35, 000
Total.....	<sup>1</sup> 4, 950, 000
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Total.....	<sup>1</sup> 4, 905, 000

<sup>1</sup> Exclusive of \$15,000 for aids to navigation provided by the Coast Guard and \$30,000 for preauthorization studies.

*Project economics.*—

	Federal	Non-Federal	Total
<hr/>			
Annual charges:			
Interest and amortization .....	\$138, 000	\$1, 000	\$139, 000
Additional maintenance dredging.....	155, 000		155, 000
Additional maintenance of slips and retaining dikes.....		2, 000	2, 000
Total.....	293, 000	3, 000	296, 000
<hr/>			
Annual benefits:			
Transportation grain.....			1, 275, 000
Petroleum and petroleum products.....			2, 679, 000
Total.....			3, 954, 000

*Benefit-cost ratio.*—13.4.

*Local cooperation.*—Furnish lands, easements, rights-of-way, and spoil disposal areas for construction and maintenance of project and necessary retaining dikes, bulkheads and embankments, or the cost of such retaining works; hold and save the United States free from damage; and provide and maintain depths in berthing areas commensurate with project depths.



*Comments of State and Federal agency.—*

Department of the Interior: No objection.

State of Mississippi: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.—*The committee considers the Pascagoula Harbor project of an emergency nature, and was so considered in the River and Harbor Act of 1960. Deeper channels are necessary for defense purposes, as the Ingalls Shipbuilding Corp. on Pascagoula River are building atomic submarines, and are allied with the Polaris program. A new oil refinery is under construction in the Bayou Casotte area, and improved channels and a turning basin to accommodate the oil tankers is essential. The committee notes that the anticipated benefits are from transportation savings on grain and petroleum products. The grain will be moved in large bulk carriers and the petroleum products in supertankers, larger than can now use these channels. The committee calls attention to the extremely high economic ratio, 13.4. This is computed on a 100-year life, but even on a 50-year life basis the project has a very satisfactory benefit-cost ratio of 11.8.

## MISSISSIPPI RIVER, BATON ROUGE TO GULF OF MEXICO, LA.

(S. Doc. 36, 87th Cong.)

*Location.—*The reach of the Mississippi River under consideration extends from Baton Rouge to the Gulf of Mexico, about 250 miles.

*Authority.—*Resolution of the Committee on Public Works, U.S. Senate, adopted May 8, 1958.

*Existing project.—*The existing Federal navigation project, Mississippi River-Baton Rouge to the Gulf of Mexico, provides for a channel in the Mississippi River 35 feet deep and 500 feet wide from Baton Rouge, mile 232.6 above Head of Passes, to New Orleans; thence 35 feet deep and not more than 1,500 feet wide measured from a line generally 100 feet from the face of the left bank wharves but not closer than 100 feet to wharves on the right bank within the port limits of New Orleans, mile 104.5 to mile 86.7; thence 40 feet deep and 1,000 feet wide to mile 0, Head of Passes; thence 40 feet deep and 800 feet wide through Southwest Pass, to mile 20.2 below Head of Passes; and thence 40 feet deep and 600 feet wide through Southwest Pass Bar Channel. Deepening the Southwest Pass Channel and the Southwest Pass Bar Channel from 35 to 40 feet, has been initiated. The Mississippi River gulf outlet project is authorized to provide a 36-foot deep channel from New Orleans to the gulf via a land cut east of the river and includes a lock at New Orleans for access to the Mississippi River.

*Navigation problem.—*The problem covers channel enlargement of Mississippi River to Baton Rouge to allow economic loading of tankers and bulk carriers of increasing size.

*Recommended plan of improvement.—*Modification of the existing project, Mississippi River, Baton Rouge to the Gulf of Mexico, La., to provide for a channel 40 feet deep and 500 feet wide from one-tenth mile below the Louisiana Highway Commission bridge at Baton Rouge to the upper limits of the port of New Orleans and within the presently authorized 35- by 1,500-foot channel in the port limits of New Orleans.

*Estimated cost (price level of September 1959).—*

Federal.....	\$357, 000
Non-Federal.....	None
Total.....	357, 000

*Project economics.—*

## Annual charges:

Interest and amortization.....	\$13, 400
Maintenance and operation.....	275, 000

Total.....	288, 400
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Annual benefits: Savings in transportation.....	1, 310, 000
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*Benefit-cost ratio.—4.5.**Local cooperation.—None.**Comments of the State and Federal agencies.—*

Department of Interior: Favorable.

State of Louisiana: Favorable.

*Comments of the Bureau of the Budget.—No objection.*

Remarks: Foreign and coastwise commerce on this important transportation artery in the reach from New Orleans to Baton Rouge more than doubled between 1948 and 1958. Important industries such as sugar refineries, food processing plants, shipyards, petroleum refineries, chemical plants, and many others are located in the area. A 40-foot channel is needed for economical operation of the large petroleum and bulk ore carriers now utilizing this section of the river. The committee notes that many portions of the river presently have adequate depth and that the proposed plan requires work in only a few short segments to provide a deeper channel to Baton Rouge. The proposed channel is amply justified and the committee believes there is an urgent need for the improvement.

MISSISSIPPI RIVER, BATON ROUGE TO THE GULF OF MEXICO, BARGE CHANNEL  
THROUGH DEVILS SWAMP, LA. (BATON ROUGE HARBOR)

This item would modify the project for the Baton Rouge barge canal, Louisiana, to provide for suitable dikes and other retaining structures in order to provide additional industrial sites with water frontage.

The project for Baton Rouge Harbor (Devils Swamp), authorized by the River and Harbor Act of 1946, provides for a slackwater channel for barge traffic and for an industrial expansion area for the port of Baton Rouge. The Flood Control Act of 1948 authorized the incorporation of Baton Rouge Harbor into the Mississippi River and tributaries project. Authorized channel dimensions are 12-foot depth, 300-foot width and 5-mile length, 2.5 miles to be constructed initially and the remaining 2.5 miles when development of the initially constructed portion warrants expansion to project limits.

Dredging of the first 2.5 miles of the channel to project dimensions was completed in 1959. At that time, necessary diking was accomplished to prevent dredged spoil from flowing back into the channel. However, authorization was not available to construct dikes west of this area to contain the fill for industrial development. Therefore, the dredged material was allowed to flow into the adjoining lowlands and



consequently the major portion of the fill, which local interests planned to use as an area for industrial development, was lost.

At the time the final 2.5 miles of the channel is dredged, local interests desire placement of the spoil westward of the channel in order to provide land for industrial expansion. However, in order to place this fill it will be necessary to construct suitable dikes and other retaining structures.

Although not required by the project authorization, the Greater Baton Rouge Port Commission voluntarily agreed to contribute the sum of \$750,000 toward a total cost of \$1,352,700 for the first 2.5-mile phase; to date, the sum of \$649,500 has been contributed. In addition, landowners donated the necessary channel easements and spoil disposal areas. Further, the port commission constructed a barge terminal at a cost of about \$3,657,000. All of these steps were taken in anticipation of and with the expectation that spoil from the dredging would provide sites for marine and industrial development.

It is estimated that the structures contemplated by this item would cost about \$400,000, with an estimated net Federal cost of \$299,500.

*Remarks.*—The committee considers this work to be justified and a local contribution of \$100,500 toward its cost to be equitable.

In view of a heavy local contribution, and the fact that local interests could have concentrated their voluntary contribution on a retaining structure if it had been realized that the development sites would not materialize, the committee recommends the additional Federal contributions.

BAYOUS TERREBONNE, PETIT CAILLOU, GRAND CAILLOU, DU LARGE, AND CONNECTING CHANNELS, LOUISIANA, AND ATCHAFALAYA RIVER, MORGAN CITY TO THE GULF OF MEXICO

(H. Doc. 583, 87th Cong.)

*Location.*—South central Louisiana, south of Houma, La.

*Authority.*—Flood Control Act of 1944; River and Harbor Act of 1945.

*Existing project.*—(a) Bayou Terrebonne.—A channel 6 feet deep below mean low gulf level, and of a suitable width from Barrow Street in Houma to Bush Canal, a distance of about 23 miles. This is the most easterly channel heading at Houma; (b) Bayou Petit Caillou (Little Caillou Bayou, La.).—A channel 5 feet deep below mean low gulf level over a 40-foot bottom width, from the head of the waterway at Bayou Terrebonne to Robinson Canal, about 20 miles; (c) Bayous Grand Caillou and Le Carpe (waterway from Intracoastal Waterway to Bayou Dulac, La.).—A channel 5 feet deep below mean low gulf level over a 40-foot bottom width, from the Gulf Intracoastal Waterway at Houma through Bayous Le Carpe, Pelton, and Grand Caillou to Bayou Dulac, a distance of about 16.2 miles; (d) The Gulf Intracoastal Waterway.—A channel 12 feet deep over a 125-foot bottom width; (e) Atchafalaya River, Morgan City to the Gulf of Mexico.—A channel 20 feet deep and 200 feet wide extending from the 20-foot depth contour in Atchafalaya Bay, near the river mouth, to that depth in the Gulf of Mexico.

*Navigation problem.*—This area of Louisiana is served primarily by waterways through the swamps. As the industries of the area ex-



pand, it follows that more and larger navigation channels will ultimately be necessary.

*Recommended plan of improvement.*—(a) Maintenance of the Houma navigation canal by the Federal Government to provide a channel 15 feet deep and 150 feet wide between the Gulf Intracoastal Waterway at Houma and Cat Island Pass, a distance of approximately 36 miles; (b) Enlargement of Bayou Le Carpe for the short distance required to provide a channel 10 feet deep and 45 feet from the Gulf Intracoastal Waterway to its junction with the Houma navigation canal.

*First cost (May 1961).*—

	Houma navigation canal	Bayou Le Carpe
Federal.....	(1)	\$45,000
Non-Federal.....		32,000
Total.....		77,000

<sup>1</sup> Maintenance only.

*Project economics.*—

	Federal	Non-Federal	Total
Houma navigation canal, annual charges:			
Interest.....	\$1,150	\$1,900	\$3,050
Amortization.....	450	300	750
Maintenance.....	105,000		105,000
Navigation aids.....	11,000		11,000
Total.....	117,600	2,200	119,800
Bayou Le Carpe, annual charges:			
Interest.....	1,350	1,300	2,650
Amortization.....	500	200	700
Maintenance.....	2,500		2,500
Navigation aids.....	400		400
Total.....	4,750	1,500	6,250

Annual benefits from movements of—	Houma navigation canal	Bayou Le Carpe
Oil and gas field material.....	\$80,460	\$9,600
Crude Oil and liquid products.....	141,100	
Shell.....	2,720	
Materials and personnel to offshore oil fields.....	38,520	
Shrimping vessels.....	44,200	
Total annual benefits.....	307,000	9,600
Benefit-cost ratios.....	2.6	1.5

*Local cooperation.*—(a) Provide, without cost to the United States, all lands, easements, and rights-of-way required for the maintenance of the Houma Navigation Canal and for establishment and maintenance of aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil; (b) provide, without cost to the United States, all lands, easements, and rights-of-way required for construction and subsequent maintenance of Bayou Le Carpe and of aids to navigation upon

the request of Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil; (c) construct and maintain, without cost to the United States, all alterations to pipelines, cables, wharves, and other facilities necessary for the enlargement and subsequent maintenance of the Bayou Le Carpe and for the maintenance of the completed Houma Navigation Canal; (d) hold and save the United States free from damages due to the maintenance of the completed Houma Navigation Canal, and the construction of the enlargement and subsequent maintenance of Bayou Le Carpe, including, but not limited to, damages to oyster beds, damages from salt-water intrusion, and damages from erosion beyond the rights-of-way furnished; and (e) maintain and operate all bridges under construction, or to be constructed, across the Houma Navigation Canal without cost to the United States.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Louisiana: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—This area of Louisiana is rich in natural resources, and is largely dependent on navigation channels and interconnecting canals for transportation. The region, both inland and offshore, is rich in oil, natural gas, and sulfur, and much of the tonnage moved is connected with development and operations in the oilfields. Federal maintenance of the Houma Navigational Canal, and improvement of the channel connection from that canal to the Gulf Intracoastal Waterway is believed desirable and is economically justified.

#### GULF INTRACOASTAL WATERWAY, LA. AND TEX.

(H. Doc. 556, 87th Cong.)

*Location.*—The Gulf Intracoastal Waterway is a Federal shallow-draft project extending 1,115 miles from Apalachee Bay, Fla., to Brownsville, Tex., on the Mexican border.

*Authority.*—House Public Works Committee resolution, June 11, 1952.

*Existing project.*—Several prior projects provided for inland waterways 5 feet deep and 40 feet wide from New Orleans to Sabine River, on the Louisiana-Texas boundary, and between Galveston Bay and Corpus Christi, Tex. The River and Harbor Acts of 1925 and 1927 provided for a channel 9 feet deep and 100 feet wide from the Mississippi River to Corpus Christi, and for an alternate channel of the same dimensions from the Mississippi River to Morgan City, La., via the Plaquemine River. The existing dimensions of 12-foot depth and minimum width of 125 feet were provided for by the River and Harbor Act of 1942. The existing project in Texas also provides for nine feeder or tributary channels, two side channels at Port Isabel, a railroad bridge over the main channel near High Island, floodgates or locks at the Brazos and Colorado Rivers, a flood-discharge channel in the Colorado River extending from the main channel of the Gulf Intracoastal Waterway near Matagorda to the Gulf of Mexico, and a harbor of refuge at Seadrift.

*Navigation problem.*—The most serious navigation difficulties result from the present width and depth of the channel which restrict



efficient operation of marine equipment. Several bends are too sharp to be negotiated with modern tows except at slow speed. A large portion of the power required for towing is expended in overcoming the drag, or friction, caused by the limited channel dimensions. This characteristic also increases vessel damages and insurance rates. Furthermore, tows experience difficulty in passing in the channel. In a 6-mile reach at Houma, La., the short sight distances at several bends, the narrow width of channel and bridge openings, and erosion of the channel banks, make it necessary for craft to proceed slowly. However, the delays that occur and hazards that exist are not considered sufficient to influence the future development of traffic.

*Recommended plan of improvement.*—That the existing project for the Gulf Intracoastal Waterway be modified to provide for channels of the following dimensions through the reaches listed, except at existing locks and other structures and through intensively developed areas: a channel 16 feet deep and 150 feet wide from the Mississippi River, via Algiers Canal, and a bypass route at Houma, La., to Atchafalaya River; a channel 16 feet deep and 200 feet wide through the reach from the Atchafalaya River to the Sabine River; a channel 16 feet deep and 150 feet wide through the reach from the Sabine River to the Houston Ship Channel with two relocations; a channel 12 feet deep and 125 feet wide through a relocated route in Matagorda Bay (mile 454.3 and mile 471.3); a channel 12 feet deep and 125 feet wide through a relocated route in Corpus Christi Bay (mile 439.4 and mile 550); maintenance of channel 12 feet deep and 125 feet wide through the existing Lydia Ann Channel between Aransas Bay and Aransas Pass; and maintenance of the existing waterway to 12 feet deep and 125 feet wide between mile 50.5 and mile 63.5, the reach which would be shunted by the Houma Bypass.

*Estimated cost (price level December 1960).*—

Federal.....	\$25, 540, 000
Non-Federal.....	7, 238, 000
Total.....	32, 778, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$930, 000	\$337, 000	\$1, 267, 000
Maintenance and operation.....	56, 000	66, 000	122, 000
Renewed maintenance (Lydia Ann Channel).....	6, 000	}	9, 000
Maintenance of navigation aids.....	3, 000		
Total.....	995, 000	403, 000	1, 398, 000
Annual benefits: Savings in navigation costs.....			3, 008, 000

*Benefit-cost ratio.*—2.2.

*Local cooperation.*—Provide, without cost to the United States, all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of aids to navigation upon the request of the Chief of Engineers. Accomplish and maintain, without cost to the United States, all alterations to pipelines, cables, and any other utilities necessary for the construction of the project; construct, maintain, and operate all bridges desired in connection with



the bypass route around Houma, La.; and hold and save the United States free from damages resulting from the construction work and the maintenance of the channels.

*Comments of the States and Federal agencies.—*

Department of the Interior: No objection.

State of Louisiana: Favorable.

State of Texas: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.—*The Gulf Intracoastal Waterway has developed over the years from channel 5 feet deep to its present authorized depth of 12 feet. Present commerce on the waterway exceeds 50 million tons. Industry in the region is increasing rapidly. Mineral production consists of petroleum, gas, sulfur, cement materials, clay, gypsum, and salt. Petroleum represents 80 percent of the mineral production. The annual production of fisheries in the coastal waters is about 325,000 tons. There are 10 deep-water ports in the region, including New Orleans, with connections with the interior. The recommended project provides for improving the channel to a 16-foot depth from the Mississippi River to the Houston Ship Channel, and two 12-foot channel relocations in Corpus Christi Bay and Matagorda Bay. The waterway from the Mississippi River to the Houston Ship Channel now carries about 40 million tons of commerce annually. Large savings in annual transportation costs will result. The committee considers the Gulf Intracoastal Waterways, and its connection with the inland waterways system is vital to the economy of the Nation. The present widths and depths, and sharp bends restrict efficient operation of modern tows. The project is amply justified, the allocation of costs between Federal and non-Federal interests appears appropriate and the committee heartily endorses the project. However, the committee suggests that the Corps of Engineers consider further the construction of the channel in the reach from the Sabine-Neches Waterway to the Houston Ship Channel to a width of 200 feet in lieu of the recommended 150 feet. Further, the Committee believes the discretionary authority of the Chief of Engineers should be interpreted to apply but not be limited to the improvements of the existing channels at proposed channel relocation sites in lieu of such relocations.

#### CALCASIEU RIVER SALT WATER BARRIER, LOUISIANA

(H. Doc. 582, 87th Cong.)

*Location.—*Southwestern corner of Louisiana.

*Authority.—*Flood Control Act of 1944 and River and Harbor Act of 1945.

*Existing project.—*The existing Federal project for Calcasieu River provides for an approach channel 42 feet deep and 800 feet wide from the Gulf of Mexico to the jetty channel; a channel 40 feet deep and 400 feet wide to the wharves of the port of Lake Charles (mile 34); a channel 35 feet deep and 250 feet wide to the vicinity of the U.S. Highway 90 bridge (mile 36.2); improvement of the river upstream to Phillips Bluff (mile 85.9) by removing logs, snags, overhanging trees, and by dredging; a mooring basin 40 feet deep at about mile 3, and turning basins 40 feet deep and 35 feet deep at miles 29.6 and 36.2, respectively; and a 12-foot by 200-foot channel from the ship channel

to Cameron, La. The Federal project for the Gulf Intracoastal Waterway, which crosses the Calcasieu River at mile 22.5, provides, among other things, for the construction of a salt water guard lock in the waterway about 0.5 mile east of the river. The lock protects the Mermentau River Basin from intrusion of salt water from the Calcasieu River.

*Problem.*—Land suitable for rice irrigation has been contaminated by salt intrusion or by continued application of river water with a salt content which has permitted accumulation of salt in the soil and thereby limiting or prohibiting rice production.

*Recommended plan of improvement.*—Construction of a salt water barrier system consisting of a diversion channel and control structure; a navigation channel with gate structure having a single pair of sector gates with a horizontal clear opening of 56 feet and a sill elevation of -13; closure of the existing river channel by an earthen dam in the bend of the river to be abandoned; and protective revetment of the left bank of the river above the head of the diversion channels.

*First cost (price levels October 1961).*—

Federal.....	\$3, 310, 000
Non-Federal.....	43, 000
Total.....	3, 353, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest.....	\$87, 780	\$1, 720	\$89, 500
Amortization.....	33, 080	280	33, 360
Maintenance and operation.....	59, 260		59, 260
Other (replacement).....	2, 180		2, 180
Total.....	182, 300	2, 000	184, 300
Annual benefits: From prevention of damage resulting from salt water intrusion.....			270, 000

*Benefit-cost ratio.*—1.5.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for the construction and subsequent maintenance of the project; provide without cost to the United States all relocations of buildings, utilities, pipelines, roads, or other facilities made necessary by the improvements; hold and save the United States free from damages due to the construction work and operation of the projects; and keep the river bendway channel between the closure dam at about mile 43.2 and the mouth of the cut-off channel at about 38.8 free from pollution to the satisfaction of the State of Louisiana Stream Control Commission without cost to the United States.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Louisiana: Favorable.

*Comments of the Bureau of the Budget.*—Noted that the improvements proposed means of mitigating adverse effects of a previously constructed project and believed that since local interests were aware that unmitigated damages might occur, but concurred in the project, there is an implied willingness to accept the project-induced damages



to obtain the project benefits. The Bureau further believed it reasonable in this case to consider provision of measures to relieve consequential damages from adverse effects not as part of the original project, but rather as a separate project under policies applicable to conditions of Federal participation and cost sharing for the purpose served by the proposed mitigation measures; and, that, unless there are compelling reasons not evident from the record, the Calcasieu River salt water barrier should be viewed as a project for irrigation water supply, with appropriate terms of repayment. Subject to consideration of these views, the Bureau of the Budget has no objection to submission of the report to the Congress.

*Recommendation of the Secretary of the Army.*—The Secretary of the Army in his letter of transmittal to the Congress, dated September 24, 1962, recommended that in keeping with the views of the Bureau of the Budget and the nature of the project of which the salt water barrier system will comprise a part, the proposal of the Chief of Engineers be modified to provide that local interests bear 50 percent of the cost of construction of the salt water barrier system, an amount presently estimated at \$1,655,000.

*Remarks.*—The city of Lake Charles is the location of several major oil refineries, chemical processing industries, and other major industrial developments. The 40-foot channel permits the oceangoing tankers to reach the other great ports of our Nation, and foreign ports. The port has a strategic and defense value, and its commerce is increasing. Lake Charles is located in an important rice-growing area, where water from the Calcasieu River is used for irrigation. Salt water from the Gulf of Mexico enters the river through the deep-draft navigation channel. A salt water guard lock in the Intracoastal Waterway east of the Calcasieu River protects the Mermentau River Basin from salt water intrusion. The committee believes that the recommended salt water barrier in the Calcasieu River is necessary and justified, and recommends its authorization.

#### MISSISSIPPI RIVER AT CLARKSVILLE, MO.

(H. Doc. 552, 87th Cong.)

*Location.*—Clarksville, Mo., is located on the right bank of the Mississippi River about 273 miles upstream from the Ohio River and immediately below lock and dam 24.

*Authority.*—House Public Works Committee resolution adopted March 30, 1955.

*Existing project.*—Lock and dam 24 was authorized by River and Harbor Act July 3, 1930, and placed in operation in May of 1940.

*Navigation problem.*—The channel in front of Clarksville has become silted up because of the position of the lock 24 guidewall which prevents any sluicing action by the Mississippi River. In addition a sewerage problem has developed from lack of sanitary sewers emptying into the area.

*Recommended plan of improvement.*—The most economical and practical means of restoring waterfront depths and eliminating the sewer problem would be by removal of 38,000 cubic yards of silt initially and about 15,000 cubic yards at 5-year intervals. If the United States is to compensate for damages it is recommended that



sole compensation be made by cash payment representing the cost of remedial work and the capitalized annual cost of maintenance.

*Estimated cost (price level of June 1961).*—Federal, \$103,300.

*Project economics.*—Annual charges, not applicable; annual benefits, not applicable; project is remedial in nature.

*Benefit-cost ratio.*—Not applicable.

*Local cooperation.*—Provide a release from all past and future claims against the construction, and operation and maintenance, of the Mississippi River 9-foot project.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Missouri: Favorable.

*Comments of the Bureau of Budget.*—No objection.

*Remarks.*—The committee believes, in accordance with the desires of local interests, that compensation should be made by a cash payment equivalent to the cost of remedial work and the capitalized annual cost of maintenance which otherwise would be undertaken at Federal expense.

#### SANDY SLOUGH, LINCOLN COUNTY, MO.

(H. Doc. 419, 87th Cong.)

*Location.*—Adjacent to the right bank of Mississippi River at lock and dam No. 25.

*Authority.*—House Public Works Committee resolution adopted July 31, 1957.

*Existing project.*—None.

*Navigation problem.*—In 1938, an earth closure dike was constructed along the slough to contain the pool of dam 25; Mississippi River systems. Stages at the mouth of Sandy Slough, as effected by pool operations of dams 25 and 26, vary from 419.0 to 429.7 above mean sea level. Flash floods, principally in the Sandy Creek Basin, are the major cause of silt in Sandy Slough. There is no longer a well-defined channel in the slough, and small boats are limited to its lower reaches at minimum pool stages. Docks which originally were located at the foot of high banks are no longer usable because of the accumulation of silt. Along the right bank there are 116 club houses, picnic areas, and accompanying recreational facilities. As a result of the unfavorable environment, caused by silting of the slough, property values have not kept pace with those in more favorable areas.

*Recommended plan of improvement.*—Remedial work to consist of dredging a channel with a bottom width of 60 feet, a depth varying up to 4 feet, and a length of 3.2 miles.

*Estimated cost (price level July 1960).*—

Federal.....	\$195, 000
Non-Federal.....	6, 000
Total.....	201, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$7,800	\$300	\$8,100
Maintenance and operation.....	4,500	500	5,000
Total.....	12,300	800	13,100

Annual benefits: Plan of improvement will remedy the injurious effects of the Mississippi River navigation project.

*Benefit-cost ratio.*—Not applicable.

*Local cooperation.*—Furnish lands, easements, and rights-of-way; hold and save the United States free from damages; assure availability of slough to public for navigation and recreation; prohibit dock construction within channel limits; and remove snags and other material not a part of normal silting.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

State of Missouri: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee is of the opinion that the remedial measures will restore the slough to its prior condition, permit its use by small boats, and is considered equitable.

## SABINE-NECHES WATERWAY, TEX.

(H. Doc. 553, 87th Cong.)

*Location.*—The Sabine-Neches Waterway, located in the southeast corner of Texas about 225 miles west of New Orleans, La., and 65 miles east of Galveston, Tex., provides deepwater access to the Gulf of Mexico for Port Arthur, Beaumont, and Orange, Tex.

*Authority.*—Resolution of the Committee on Public Works of the House of Representatives, adopted June 3, 1959.

*Existing project.*—The existing Federal project provides for a channel 37 feet deep and 800 feet wide from deepwater in the gulf through the outer bar decreasing to 36 feet deep and 500 feet wide through Sabine Pass, thence 36 feet deep and 400 feet wide to Port Arthur and to the mouth of the Neches River, decreasing to 350 feet wide in the Neches River to Beaumont; a channel 30 feet deep and 200 feet wide across the north end of Sabine Lake and up the Sabine River to Orange. It also includes stone jetties at the Sabine Pass entrance, turning basins at Port Arthur and Beaumont, modification of the bridge at Port Arthur by extending the east approach to span the widened Sabine-Neches Canal and other related improvements.

*Navigation problems.*—The existing channel to Port Arthur and Beaumont is inadequate for the operation of fully loaded tankers greater than 27,000 deadweight tons which are replacing the older tankers in the coastwise movement of petroleum. Also, the bascule span of the Port Arthur Bridge is a bottleneck to traffic in the Sabine-Neches Canal and its location in the westerly half of the channel makes navigating that reach hazardous.



*Recommended plan of improvement.*—The recommended plan provides for deepening the channel to 42 feet from the gulf across the Sabine Bank into the jetty channel, thence a depth of 40 feet in all inland channels to Port Arthur and to the Beaumont turning basin, including the Sabine Pass anchorage basin, Port Arthur turning basins including approach and connecting channels; widening the Port Arthur Canal to 500 feet and the channel from the mouth of the Neches River to the Beaumont turning basin to a width of 400 feet; three turning points at junctions of channel cutoffs with natural bends in the Neches River; maintenance of a short reach of former project channel in the Neches River; a shallow-draft extension 12 feet deep and 125 feet wide in the Sabine River from the upstream end of the existing project to a point near Echo, Tex., and replacement of the obstructive bridge at Port Arthur.

*Estimated cost (price level of March 1962).*—

	Federal	Non-Federal	Total
Improved deep-draft channel.....	\$20,541,000	\$1,378,000	\$21,919,000
Shallow-draft extension.....	289,000	170,000	459,000
Total.....	20,830,000	1,548,000	22,378,000
Project economics:			
Annual charges:			
Deep-draft channel:			
Interest and amortization.....	636,000	76,000	712,000
Maintenance and operation.....	620,000	24,000	644,000
Total.....	1,256,000	100,000	1,356,000
Shallow-draft extension:			
Interest and amortization.....	8,000	6,000	14,000
Maintenance and operation.....	1,000		1,000
Total.....	9,000	6,000	15,000
Annual benefits:			
Deep-draft channel:			
Savings in tanker operation.....			2,173,000
Reduced hazards.....			160,000
Total.....			2,333,000
Shallow-draft extension: Savings in operation.....			28,000

*Benefit-cost ratio.*—Deep-draft channel, 1.7; shallow-draft extension, 1.9.

*Local cooperation.*—Furnish all lands, easements, and rights-of-way including spoil disposal areas with suitable retaining dikes, bulkheads, and embankments; hold and save the United States free from damages; make alterations to pipelines, powerlines, utility lines, cables, and highway facilities, except replacement of the bridge at Port Arthur; furnish the necessary rights-of-way and easements required for relocating the highway bridge at Port Arthur and contribute, in cash, a share of its construction cost, a sum presently estimated at \$220,000 for the expired service of the existing bridge, but excluding the cost for special benefits and betterments attributable to highway use which depend upon final design; assume all obligations of ownership, operation, and maintenance of the replacement highway bridge at Port Arthur; provide and maintain at local expense depths in berthing areas and local access channels commensurate with depths in the related project areas. Local interests have indicated their willingness and ability to meet these requirements.



*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Commerce: Favorable.

State of Texas: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.*—The Sabine-Neches Waterway serves the ports of Beaumont, Orange, and Port Arthur in which are located several major oil refineries, chemical processing industries, and other major developments. A large volume of commerce moves over the waterway annually and this is expected to increase significantly in the future. About 60 percent of the tonnage on the waterway is petroleum and petroleum products moving to east coast ports in large oceangoing tankers and the proposed deepening and widening is believed desirable. A shallow-draft extension in the Sabine River above Orange, Tex., is also justified and believed desirable.

## WALLISVILLE RESERVOIR, TRINITY RIVER, TEX.

(H. Doc. 215, 87th Cong.)

*Location.*—Trinity River rises in north-central Texas and flows in a southerly direction for about 700 miles and empties into Trinity Bay, a part of Galveston Bay. Wallisville Dam would be located in Chambers County near the mouth of the river.

*Authority.*—Resolutions, House Committee on Rivers and Harbors adopted March 31, 1944, and February 28, 1945; resolution, Senate Committee on Public Works adopted January 20, 1958; River and Harbor Act of 1958.

*Existing project.*—The authorized Federal navigation project for the lower Trinity River provides for a sea-level channel 9 by 150 feet extending from the gulf up to the town of Liberty, a distance of 49 miles.

*Problems.*—Adequate and dependable navigation is vital to support the economy of the area; similarly, water conservation for municipal and industrial uses is important to the present and future growth. A barrier against salt water intrusion is of major importance to preserve fresh water, particularly for irrigation of the rice crop, which largely sustains the local economy.

*Recommended plan of improvement.*—Recommended plan consists of a small reservoir (total capacity 55,700 acre-feet) for purposes of water conservation, navigation, prevention of salt water intrusion, recreation, and fish and wildlife. Also recommended is a diversion channel with appurtenant lock for navigation purposes. Further, that careful consideration be given to the recommendations of the U.S. Fish and Wildlife Service providing for acquisition of about 2,000 additional acres of land for purposes of a national wildlife refuge at the reservoir.

*Estimated cost (price level of January 1959).—*

Federal	----- <sup>1</sup> \$9, 162, 000
Non-Federal	----- <sup>(2)</sup>
Total	----- 9, 162, 000

<sup>1</sup> Exclusive of cost of lands for wildlife refuge purposes, estimated at \$400,000.<sup>2</sup> Local reimbursable costs currently estimated at \$1,682,000.

*Project economics.—*

Annual charges:	
Interest and amortization.....	\$347, 200
Maintenance, operation, and replacement.....	164, 700
Total.....	511, 900
Annual benefits:	
Salinity control.....	250, 000
Navigation.....	376, 000
Water supply.....	149, 300
Fish and wildlife conservation.....	29, 000
Fish and wildlife recreation.....	184, 000
General recreation.....	307, 000
Total.....	1, 295, 300

*Benefit-cost ratio.—2.5.*

*Local cooperation.*—Reimburse the United States all costs allocated to water conservation and one-half the costs allocated to salinity control, the totals being currently estimated at \$1,682,000 for construction and \$27,200 annually for maintenance, operation, and replacements.

*Comments of the State and Federal agencies.—*

State of Texas: Favorable.

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of HEW: Favorable.

Federal Power Commission: Favorable.

*Comments of the Bureau of the Budget.*—No objection. Bureau expects that prior to request for construction funds, project costs would be reallocated to conform with then current administration standards.

The committee has approved the Wallisville Reservoir project in Texas. However, in reviewing the report of the Chief of Engineers, it is noted that there is a proposal for the acquisition of land for establishment of a national wildlife refuge at the reservoir. Since long-range plans for the development of national wildlife refuges at reservoirs have not been completed, it is the recommendation of the committee that no land be acquired for such purposes at this time.

## GULF INTRACOASTAL WATERWAY—CHANNEL TO PALACIOS, TEX.

(H. Doc No. 504, 87th Cong.)

*Location.*—Palacios, Tex., is located in Matagorda County on the west shore of Trespacios Bay about 96 miles southwest of Galveston and 97 miles northeast of Corpus Christi.

*Authority.*—Resolution of the House Committee on Rivers and Harbors adopted September 13, 1944.

*Existing project.*—The existing Federal project provides for a channel 9 feet deep, 100 feet wide and about 13.5 miles long extending from the main channel of the Gulf Intracoastal Waterway across Matagorda and Trespacios Bays to a turning basin at Palacios, Tex.

*Navigation problem.*—The present channel is inadequate for the large fishing boats that operate in the Gulf of Mexico and for fully loaded barges operating in the Gulf Intracoastal Waterway. Also prevailing winds generate considerable wave action in the turning basins making vessel maneuvering difficult during periods of strong winds.



*Recommended plan of improvement.*—Provides for a channel 12 feet deep and 125 feet wide extending from the main channel of the Gulf Intracoastal Waterway in Matagorda Bay to the turning basins at Palacios, two protective breakwaters at the entrance to the turning basins, and deepening and maintaining the two turning basins and connecting channel to 12 feet with dimensions of 200 feet by 700 feet in turning basin No. 1, 300 feet by 1,150 feet in turning basin No. 2, and 150 feet to 480 feet wide by 450 feet long in the connecting channels.

*Estimated cost (price level of October 1961).*—

Federal.....	\$818, 000
Non-Federal.....	70, 000
Total.....	888, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$23, 500	\$3, 000	\$26, 500
Maintenance and operation.....	15, 000		15, 000
Navigation aids.....	6, 000		6, 000
Total.....	44, 500	3, 000	47, 500
Annual benefits:			
Transportation savings.....			41, 000
Reduced hazards.....			14, 000
Total.....			55, 000

*Benefit-cost ratio.*—1.2.

*Local cooperation.*—Furnish all lands, easements, rights-of-way, and spoil disposal areas which have been suitably diked; hold and save the United States free from damages; make alterations to pipelines, powerlines, utility lines, cables, and highway facilities; continue to provide public terminal and transfer facilities open to all; and provide depths in berthing areas commensurate with project depths. Local interests have indicated their willingness and ability to meet these requirements.

*Comments of States and Federal agencies.*—

Department of the Interior: Favorable.

State of Texas: Favorable.

*Comments of the Bureau of the Budget.*—No objection to submission of report to Congress. However, in view of the relatively marginal economic justification of the project and the obvious difficulty of predicting benefits over a period as long as 100 years, the Bureau of the Budget would expect that the project, if authorized, would be reevaluated prior to any request for funds to initiate construction.

*Remarks.*—The recommendation to modify the existing project by constructing this branch channel to the same dimensions as the Gulf Intracoastal Waterway with which it connects is logical. Palacios is the distribution center for a 1,000 square mile area. Oilfield equipment and supplies are received by barge and crude oil shipped. Four seafood processing plants serve the fishing fleets operating from the Matagorda Bay area. The enlarged channel would increase the safety and efficiency of the barge traffic and larger fishing vessels operating in the channel. The protective breakwaters at the entrance to the



turning basins will reduce damages to vessels during periods of strong winds or storms. The committee believes the proposed improvement is desirable and justified.

#### GULF INTRACOASTAL WATERWAY CHANNEL TO VICTORIA, TEX.

(H. Doc. 288, 87th Cong.)

*Location.*—The channel to Victoria is located in the south central part of Texas about 55 miles northeast of Corpus Christi and 95 miles southwest of Freeport, Tex.

*Authority.*—Resolution of the Committee on Public Works of the House of Representatives, adopted June 3, 1959.

*Existing project.*—Provides for a sea level channel 9 feet deep and 100 feet wide extending northwestward about 35 miles from the Gulf Intercoastal Waterway to a turning basin about 7 miles south of Victoria, and a side channel about 2 miles long to a turning basin at Seadrift. The project is essentially completed as far as the Missouri Pacific Railroad crossing at about channel mile 29 including the side channel to Seadrift. Work is underway on a 3-mile segment above the railroad crossing leaving almost 3 miles of channel and the turning basin at Victoria to be started.

*Problem.*—Local interests desire modification of the requirements of local cooperation for the authorized project to conform with current policy concerning construction of railroad bridges over navigation channels dredged in land cuts and construction and maintenance of turning basins.

*Recommended plan of improvement.*—The Federal Government construct the bridge for the Missouri Pacific Railroad crossing at channel mile 29.2; dredge and maintain a turning basin 9 feet deep, with average width of 600 feet and average length of 780 feet near Victoria, Tex.; and maintain a turning basin 9 feet deep, 250 feet wide, and 300 feet long at Seadrift, Tex.

*Estimated cost (price level of June 1960).*—

Railroad bridge.....	\$1, 300, 000
Victoria turning basin.....	290, 000
<b>Total.....</b>	<b>1, 590, 000</b>

	Project cost as presently authorized	Proposed modification	Project cost in- cluding proposed modification
Federal.....	\$6, 549, 000	+\$1, 590, 000	\$8, 139, 000
Non-Federal.....	6, 486, 000	—1, 590, 000	4, 896, 000
<b>Total.....</b>	<b>13, 035, 000</b>		<b>13, 035, 000</b>

*Local cooperation.*—Furnish all lands, easements, and rights-of-way required for construction of the railroad bridge, for construction and maintenance of the Victoria turning basin, and for maintenance of the turning basin at Seadrift, including suitable areas for disposal of spoil (adequately diked and bulkhead); hold and save the United States free from damages; bear all costs of owning, operating and maintaining the new railroad bridge and related sections of railroad embankment and track; make alterations in pipelines, powerlines, utility lines, cables and highway facilities in connection with work at

the Victoria and Seadrift turning basin; and provide adequate public terminal and transfer facilities, open to all on equal terms. Local interests have indicated their willingness and ability to meet the requirements of local cooperation.

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$320,000	\$262,000	\$582,000
Operation and maintenance.....	193,000	0	193,000
Total.....	513,000	262,000	775,000
<b>Annual benefits:</b>			
General navigation benefits.....			1,272,000
Flood damages prevented.....			15,000
Increased land utilization due to prevention of flooding.....			160,000
Total.....			1,447,000

*Benefit-cost ratio.*—1.9.

*Comments of State and Federal agencies.*—

Department of the Interior: Favorable.

State of Texas: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The project was initially authorized in the Rivers and Harbors Act of 1945. Subsequent to this authorization it has been the policy of the Congress to recognize that bridges across new, artificial waterways and that turning basins are necessary and integral parts of a waterway project and the costs should be borne by the United States. The Committee believes that since construction of the project was initiated after adoption of the new policy and construction is still underway, it would be equitable to relieve local interests of the responsibility to construct the railroad bridge and the turning basin and for these costs to be assumed by the United States.

ILLINOIS WATERWAY, ILL. AND IND.

(H. Doc. 31, 86th Cong.)

*Location.*—The Illinois Waterway provides a channel for barge navigation between the Mississippi River, 38 miles above St. Louis, and Lake Michigan at Chicago.

*Report authorized by.*—House Rivers and Harbors Committee resolution adopted March 16, 1943; Senate Public Works Committee resolution adopted March 24, 1956.

*Existing project.*—Provides for nine locks and six dams; navigation channel 9 feet deep in the Illinois and Des Plaines Rivers from the mouth of the Illinois River to Lockport, a distance of 291.1 miles; upstream extension and branch channels 9 feet deep in the Chicago Sanitary and Ship Canal, Chicago River, Calumet-Sag Channel, Little Calumet River, Calumet River, and Grand Calumet River; and appurtenant improvements including bridge changes. The project is complete except for construction of two locks, one on Calumet River and other on Grand Calumet River and improvements of the branch channel in the Grand Calumet River.



*Navigation problem.*—Commerce on the Illinois River has increased since the improved waterway to Chicago was opened from about 1.7 million tons in 1935 to 21.4 million tons in 1955. Most of the traffic delays now occur at the locks because many tows require rearrangement to permit a single lockage and the larger tows must make a double lockage. The congestion at the locks resulting from these delays will be more critical as the traffic increases.

*Recommended plan of improvement.*—Modification of existing project to provide for construction of supplemental locks, 110 feet wide and 1,200 feet long, at the seven existing lock sites on the Illinois and Des Plaines Rivers. (The first two locks estimated to be needed by 1968 and the last three by 1977.)

*Estimated cost (price level of January 1957).*—All Federal, \$114,652,000.

*Project economics.*—

Annual charges-----	\$4, 594, 300
Annual benefits-----	22, 320, 000
(All transportation savings.)	

*Benefit-cost ratio.*—4.9.

*Local cooperation.*—Provided that prior to construction local interests agree that they will assume title to, and maintain and operate the new bridge across the lower approach to the Brandon Road lock when the bridge is placed in service.

*Comments of State and Federal agencies.*—

Fish and Wildlife Service: No interest in project.

State of Illinois: Concurs in conclusions and recommendations.

*Comments of the Bureau of the Budget.*—Notes that commerce on the waterway has increased at a rapid rate since 1935; however, it states that a projection of the past rate of growth is by no means certain. The BOB does not question the economic justification, but considers authorization 10 to 19 years in advance of the need is premature and accordingly urges that the report be regarded only as a study of future need, and that the estimates on commerce and average tons per lockage be brought up to date in a future report to Congress in 5 years.

*Remarks.*—The committee notes the exceedingly high benefit-cost ratio of 4.9 for this project. It also notes the comments of the Bureau of the Budget which questions the estimates of traffic growth, and that another report be submitted to Congress in 5 years. Since almost 4 years of the 5-year period the Bureau of the Budget referred to has elapsed, the committee sees no necessity of submitting another report in the near future. It recommends authorization of \$40 million for initiation and partial accomplishment of the project at this time.

KASKASKIA RIVER, ILL.

(S. Doc. 44, 87th Cong.)

#### DESCRIPTION OF PROJECT

*Location.*—The Kaskaskia River rises in Champaign County in eastern Illinois and flows southwesterly about 325 miles to the Mississippi River at a point 60 miles downstream from St. Louis, Mo., a short distance above Chester, Ill.



*Authority for report.*—Senate Public Works Committee resolution adopted August 17, 1954. The report has been transmitted to Congress and printed as Senate Document 44, 87th Congress.

*Existing project.*—The original Federal improvement of the river for navigation by deepening to 3 feet to mile 12, and removing snags to mile 22, was abandoned in 1895. The river is not used by commercial craft at the present time. The existing Federal project for flood control and other purposes on the Kaskaskia River provides for dams and reservoirs at Carlyle and Shelbyville, and levees between Cowden and Vandalia, below Carlyle, and New Athens. Carlyle Reservoir is under construction and planning is underway on the Shelbyville project. Work has not started on the levee. The reservoirs, in addition to reducing floodflows, would aid navigation by augmenting flows in the Mississippi River, provide municipal and industrial water supply, benefit fish and wildlife, and afford opportunity for recreational developments.

*Navigation problems.*—Local interests desire a 9-foot navigation channel in the lower 50 miles of the Kaskaskia River to facilitate the outbound movements of coal and grain, and to augment the local economy.

*Recommended plan of improvement.*—Provides for a channel 9 feet deep and 200 feet wide from the mouth of Kaskaskia River to Fayetteville, Ill., by enlarging the present channel where required, and making overbank cuts to eliminate sharp bends; and a dam at mile 4 with a single lock 84 feet wide and 600 feet long. The plan of improvement also provides for modification of the storage allocations in the Carlyle and Shelbyville Reservoirs, to provide water for Kaskaskia River navigation in lieu of Mississippi River navigation; and future reallocation of storage in the two reservoirs when additional water is needed for navigation, if the use of such storage is found by the Chief of Engineers to be feasible and more economical than pumping water from below the dam into the navigation pool.

*Estimated cost (price level, January 1960).—*

Federal.....	\$58, 200, 000
Non-Federal.....	2, 300, 000
Total.....	60, 500, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$2, 223, 300	\$119, 000	\$2, 342, 300
Maintenance and operation.....	270, 000	0	270, 000
Replacements.....	17, 700	0	17, 700
Navigation aids.....	19, 000	0	19, 000
Total.....	2, 530, 000	119, 000	2, 649, 000

*Annual benefits.*—Transportation savings on coal movements, \$5,120,000.

*Benefit-cost ratio.*—1.9.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way; hold and save the United States free from damages; make all necessary alterations to sewer, water supply, drainage, and other utility facilities; bear a proportionate

share of the costs of relocations of railroad and highway bridges; remove one highway bridge at own expense; maintain all bridges over the improved waterway; provide necessary loading and mooring facilities; provide terminal and transfer facilities; and establish agency for controlling withdrawal of water from river below Carlyle Dam.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: No objection.

State of Illinois: Approve project.

*Comments of the Bureau of the Budget.—*The Bureau of the Budget notes that the Acting Chief of Engineers refers to the uncertainty of railroad rate adjustments that may be proposed in the future and the action that the Interstate Commerce Commission may take thereon, and that he recommends, if the project is authorized, a reevaluation of project economic justification in light of rates then existing, would be made when funds are requested for construction. The Bureau of the Budget concurs in this recommendation. The Bureau of the Budget further advises that there would be no objection to the submission of the proposed report to the Congress.

*Benefits.—*The major benefits that have been assigned to the improvement of the lower Kaskaskia River for navigation are transportation savings for movement of coal. Coal reserves adjacent to the Kaskaskia River are substantial, with an estimated 1.8 to 2 billion tons located within 15 miles of the proposed navigation project. Coal requirements for market areas in which this coal can compete are said to be increasing rapidly. The improved waterway would permit the movement of a maximum of about 20 million tons of coal annually. The estimated annual benefits are based on an average annual waterborne movement of about 15,200,000 tons throughout the life of the project, at a transportation saving of about \$0.35 per ton. Benefits from the improvement in the economic conditions of the area are real, but have not been evaluated. The economic ratio for the project is 1.9 to 1.

A project for canalization of the Kaskaskia River between Fayetteville and the Mississippi River, by construction of a dam and 84- by 600-foot lock at mile 4 and a channel 200 feet wide and 9 feet deep, appears technically feasible and economically justified. Although other commodities may eventually move over the waterway, the principal known commodity that will use it and the one on which the economies are based is coal. Between New Athens and Fayetteville there are proven coal reserves of approximately 1.8 billion tons within 15 miles of the waterway. This coal is of superior quality and can be marketed to compete successfully with other coalfields in the mid-western region of the United States. If a waterway were provided, it would result in a savings to the users of coal, because of the reduction in transportation costs. Although the development of nuclear fuels is progressing and may be of significance by the end of the present century, their widespread use to compete with coal is not a certainty.

The southern Illinois region was stated to be a depressed area with a large pool of manpower available, but also with a high rate of unemployment. Mining of coal in the area has decreased in recent years because of the high cost of transportation. Local interests have ex-



pressed the belief that provision of the proposed navigation project will attract heavy industry to the region. With coal, water, limestone, and cheap transportation available in this area, and a large supply of iron ore located a short distance away in Missouri, extensive industrial development is anticipated. The committee was advised that two private utility companies are now planning to construct two steam electric generating plants on the river adjacent to the navigation project, if its eventual construction appears eminent. Kaiser Aluminum Co. has also acquired an area for the future location of an aluminum plant in event the Kaskaskia River is canalized. Extensive use of the waterway for transportation of corn, wheat, oats, and soybeans, was forecast. Proponents of the project stated that operation of the Kaskaskia River navigation project would be of great benefit to the railroads of the area, due to increased freight movement from increased industrial activities, new markets that would be opened, and that coal moved by water would replace very little of that now moving by rail. These proponents believe the prospective coal tonnages that would move over the improved waterway, and the savings in transportation costs are conservative.

Opponents of the recommended navigation project, primarily the railroad interests, have expressed their belief that such project would prove detrimental to the southern Illinois region, as it would force the closing of coal mines removed from close proximity to the Kaskaskia River. Distressed areas of eastern Kentucky and West Virginia would also be adversely affected by production of coal for movement by water routes to the Great Lakes region, and making the Kaskaskia coal more competitive. Coal was stated to be sold on margins of less than \$0.50 per ton, an amount approximately equal to the estimated savings by use of water transportation. Another adverse effect on the local economy was claimed if rail shipments are curtailed, from reduction of railroad payrolls in the area and local taxes paid by such railroads. Opponents of the project also claim that prospective coal tonnages that would be moved over an improved waterway are unrealistic, and that the project would benefit private and exempt carriers, particularly one large coal producer who has constructed a railroad from the coalfields and docks on the Mississippi River for movement of the coal by water transportation. The taxpayers of the Nation would be required to pay for the anticipated benefits that would be provided by the navigation project, which would adversely affect the large investment the railroads have in this region. It was stated that at the present there are no landlocked coal mines in the area.

Under presently authorized plans of operation, storage is included in the Carlyle and Shelbyville Reservoirs for navigation releases for the middle and lower Mississippi River. In his report, the Chief of Engineers proposes assignment of additional storage in these upstream reservoirs to navigation, or provision of pumping facilities at the navigation dam to pump upstream the water lost in each lockage. Final decision was to be deferred until the need become evident. Since the low-water periods on the Kaskaskia River do not coincide with those on the Mississippi River, early consideration should be given to this matter to assure continued supply of water for navigation and industrial users during drought periods.

The modification of bridges where required as a part of the proposed improvement is included in the cost of the project. The Illinois



Division of Highways objected to the use of lift spans on Federal and State highways in the interest of traffic safety and continuity of traffic flow. To meet this requirement, high-level spans with adequate vertical and horizontal clearances have been used in making the estimates of cost. One new highway bridge will be built over a new channel. One highway bridge, on State Highway No. 3 at New Athens, Ill., will be constructed by the State on a new alignment. Local interests will be required to remove the old bridge at their own expense.

#### COMMITTEE VIEWS

The committee is of the opinion that in the lower Kaskaskia Basin there are adequate reserves of minable coal of such quality that it can compete with other coalfields in this region if a waterway were available for transportation, and that based upon the present economic trends of the United States, there will be a large market for this coal. The area is rich in natural resources and susceptible to extensive industrial development. Local residents are in support of the project.

The committee believes it feasible and advisable to improve the Kaskaskia River between Fayetteville, Ill., and the Mississippi River for modern barge transportation by a lock and dam located at mile 4, by channel straightening, deepening, and widening, by the provision of supplemental water supply from Carlyle and Shelbyville Reservoirs, and by abandonment, replacement, or alteration of all bridges which now cross the waterway. The proposed improvement would reduce the distance from the Mississippi River to Fayetteville, Ill., from 50 miles to 38 miles by straightening and realinement of the channel and cutting across sharp bends. The committee further believes that the Kaskaskia River project would be a valuable addition to the inland waterway system of the United States, and be a further step in the development of the natural and water resources of our country.

The committee is aware that estimated benefits from the recommended improvement is based on present freight rates in the area, that an authorization of such improvement might result in lowering existing rates for rail movement of coal from the area, and approves the recommendations of the Chief of Engineers and the Bureau of the Budget that reevaluation of the project economics in light of actual rates then existing should be undertaken prior to initiation of construction thereon.

The committee notes the favorable economic ratio of this project and believes that its authorization is economically justified.

## HARBORS ON MISSISSIPPI RIVER (MOUTH OF MISSOURI RIVER TO MINNEAPOLIS)

(H. Doc. 513, 87th Cong.)

*Location.*—The harbors are located in communities in Minnesota, Wisconsin, Iowa, Illinois, and Missouri along the upper Mississippi River between the mouth of the Missouri River and Minneapolis, Minn.

*Authority.*—Resolution of the Committee on Public Works of the House of Representatives adopted April 22, 1947, and resolutions of the Committee on Public Works of the U.S. Senate adopted March 4, 1947, and August 26, 1955; River and Harbor Act of March 2, 1945; Flood Control Act approved July 24, 1946.

*Existing project.*—The Federal navigation project for the upper Mississippi River provides for a navigation channel of 9-foot depth between the Missouri River and Minneapolis to be obtained by construction of locks and dams supplemented by dredging. This depth is generally available as far upstream as St. Anthony Falls in Minneapolis where work is continuing. Authorized improvements also include 10 commercial barge harbors (5 completed) and 16 small boat harbors (12 completed). In addition to these, a number of mooring basins for small craft have been established by municipalities and clubs. Other local interests have constructed more modest facilities for serving recreational boats.

*Navigation problem.*—There is need for additional protected harbors at various localities along the Mississippi River for existing and future recreational and commercial fishing craft.

*Recommended plan of improvement.*—Provides for construction and maintenance of 14 small boat harbors and for maintenance of 1 existing small boat harbor at Quincy, Ill. The 15 harbors are listed below:

<i>Harbor</i>	<i>Location on Mississippi River</i>
Harriet Island, St. Paul, Minn.....	Mile 840.2
Bay City, Wis.....	Mile 785.9
Pepin, Wis.....	Mile 767.1
Cassville, Wis.....	Mile 606.6
Bellevue, Iowa.....	Mile 555.6
Savanna, Ill.....	Mile 537.0
Clinton, Iowa.....	Mile 518.8
Moline, Ill.....	Mile 488.0
Davenport, Iowa (Credit Island).....	Mile 478.7
Andalusia, Ill.....	Mile 473.0
New Boston, Ill.....	Mile 433.1
Keokuk, Iowa.....	Mile 353.5
Warsaw, Ill.....	Mile 359.1
Quincy, Ill.....	Mile 327.3
Grafton, Ill.....	Mile 218.5

All of the above harbor channels would be dredged to a depth of 5 feet below minimum pool level. It is further recommended that construction of individual harbors be permitted whenever funds for the purpose are available and the prescribed local cooperation for the particular harbor has been furnished.

*Estimated cost.—*

Location	Federal	Non-Federal	Total	Non-Federal percent of Federal construction
St. Paul, Minn.....	\$7,000	\$7,000	\$14,000	50.0
Bay City, Wis.....	24,000	6,000	30,000	19.5
Pepin, Wis.....	151,000	24,000	175,000	13.6
Cassville, Wis.....	163,000	47,000	210,000	22.5
Bellevue, Iowa.....	78,000	37,000	115,000	32.4
Savanna, Ill.....	98,000	47,000	145,000	32.2
Clinton, Iowa.....	38,000	21,000	59,000	35.5
Moline, Ill.....	119,000	60,000	179,000	33.3
Davenport, Iowa.....	78,000	44,000	122,000	35.8
Andalusia, Ill.....	15,000	2,000	17,000	12.0
New Boston, Ill.....	20,000	4,000	24,000	15.8
Keokuk, Iowa.....	192,000	65,000	257,000	25.4
Warsaw, Ill.....	45,000	8,000	53,000	14.7
Quincy, Ill.....				
Grafton, Ill.....				
Total.....	1,205,000	549,000	1,754,000	50.0

*Project economics and benefit-cost ratio.—*

Location	Amortization and interest	Additional Federal annual maintenance	Total annual charges	Total annual benefits	Benefit-cost ratio
St. Paul, Minn.....	\$1,900	\$2,500	\$4,400	\$38,900	8.8
Bay City, Wis.....	1,500	2,500	4,000	18,100	4.5
Pepin, Wis.....	7,300	800	8,100	16,400	2.0
Cassville, Wis.....	8,300	1,000	9,300	16,200	1.7
Bellevue, Iowa.....	4,600	1,400	6,000	15,300	2.6
Savanna, Ill.....	6,000	2,900	8,900	23,600	2.7
Clinton, Iowa.....	2,600	2,500	5,100	30,400	6.0
Moline, Ill.....	7,300	800	8,100	14,100	1.7
Davenport, Iowa.....	5,200	3,000	8,200	23,600	2.9
Andalusia, Ill.....	700	500	1,200	8,800	7.3
New Boston, Ill.....	1,000	1,200	2,200	9,800	4.5
Keokuk, Iowa.....	10,100	700	10,800	17,500	1.6
Warsaw, Ill.....	2,000	1,100	3,200	14,600	4.6
Quincy, Ill.....		5,000	5,000	21,300	4.1
Grafton, Ill.....	15,200	2,100	17,300	59,000	3.4
Total.....		28,000			3.2

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of aids to navigation upon the request of the Chief of Engineers including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; hold and save the United States free from damages that may result from the construction and maintenance of the project; provide and maintain necessary mooring facilities and utilities, including a public landing with suitable supply facilities open to all on equal terms, and dredge berthing areas to a depth commensurate with the depth of the Federal channel improvement; reserve spaces within the anchorage and mooring facilities adequate for accommodation of transient small boats; accomplish such utility or other relocations or alternations as are necessary for project purposes; establish a competent and properly constituted public body empowered to regulate the use, growth, and free development of the harbor facilities with



the understanding that said facilities will be open to all on equal terms; and make an equitable cash contribution toward the Federal first cost of each harbor development, the percentages and presently estimated amounts of which are listed in the table showing estimated costs. Local interests have indicated willingness and ability to comply with requirements.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Commerce: Favorable.

State of Minnesota: Favorable.

State of Wisconsin: Favorable.

State of Iowa: Favorable.

State of Illinois: Favorable.

State of Missouri: Favorable. However, due to local problems the Governor requested that further consideration of the harbors at Louisiana and Clarksville be delayed.

*Comments of the Bureau of the Budget.—*No objection to submission of report to Congress. However, the Bureau of the Budget notes that for none of the 14 new harbors recommended by the Chief of Engineers is the Federal cost in excess of \$200,000. The Budget states that construction of these harbors could be accomplished under the provisions of section 107 of the 1960 River and Harbor Act without further action by the Congress.

*Remarks.—*The committee notes that there are 15 individual harbor projects and that each one is amply justified.

ONTONAGON HARBOR, MICH.

(H. Doc. 287, 87th Cong.)

*Location.—*Ontonagan Harbor is located on the south shore of Lake Superior, 136 water miles east of Duluth-Superior Harbor, Minn., and Wis., and 274 water miles west of Sault Ste. Marie, Mich.

*Authority.—*Resolutions of the Committees on Public Works of the U.S. Senate and House of Representatives, adopted July 2, 1958, and July 16, 1958, respectively.

*Existing project.—*The existing Federal project, completed in 1938, provides for a channel 17 feet deep and 400 feet to 150 feet wide from the lake to the piers; a channel between the piers 150 feet wide, 17 feet deep in the outer 250 feet, thence 15 feet deep in the inner 2,200 feet; an inner basin 15 feet deep, 900 feet long, and up to 285 feet wide between limits 50 feet from existing wharves; and 4,990 feet of entrance piers. Channel maintenance since 1950 has been limited mainly to serving the needs of commercial fishing and other shallow-draft traffic.

*Navigation problem.—*Ontonagon Harbor is not suitable for use by modern Great Lakes vessels because of the limited project depth of 15 feet and the small maneuvering area in the inner harbor. The harbor presently affords safe vessel operation for only commercial fishing and other small craft.

*Recommended plan of improvement.—*Provides for a depth of 23 feet in the approach channel, with suitable widening, and in the outer 450 feet of the entrance channel; a depth of 22 feet in the next 1,150 feet of the entrance channel; a depth of 21 feet in the remainder of the entrance channel and in the basin to within 800 feet of the highway bridge; removal of the inner 955 feet of the west pier, and extension of

the basin westward for 1,750 feet, at a depth of 21 feet and a minimum width of 200 feet; a sedimentation basin within the harbor, 30 feet deep, with a capacity of 155,000 cubic yards; reconstruction of the outer 370 feet of the east pier; and strengthening the remaining piers and raising them to an elevation 8 feet above low water, except the outer 96 feet of the west pier.

*Estimated cost (price level of September 1960).—*

Federal.....	\$4, 741, 000
Non-Federal.....	145, 000
Total.....	4, 886, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$177, 000	\$7, 000	\$184, 000
Maintenance.....	35, 000		35, 000
Maintenance, navigational aids.....	1, 000		1, 000
Total.....	213, 000	7, 000	220, 000
Annual benefits:			
Transportation savings:			
Receipts.....			284, 800
Shipments.....			54, 400
Total.....			339, 200

*Benefit-cost ratio.—1.5.*

*Local cooperation.—*(a) Provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial subsequent disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; (b) hold and save the United States free from damages due to the construction and maintenance of the improvements; (c) accomplish without cost to the United States alterations or relocations as may be required of roads, structures, and utility facilities; (d) provide and maintain adequate public terminal and transfer facilities, open to all on equal terms, including dredging of berthing areas to depths commensurate with related project depths; and (e) prohibit bulkhead construction or other encroachment on the southerly shore in the harbor retained as a natural spending beach for waves. Local interests have indicated willingness and ability to meet requirements.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Commerce: States that it is the opinion of that agency that the available record does not clearly indicate sufficient economic benefits to warrant its endorsement.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.—*States that while there would be no objection to the submission of the proposed review report on Ontonagon Harbor to the Congress, the Bureau of the Budget would expect that if the proposed improvement is authorized by the Congress it would be reexamined prior to submission of a request for funds to



initiate its construction in the light of policies that may result from the current transportation review and of local conditions existing at that time.

*Remarks.*—The proposed increase in project depths will permit the of modern Great Lakes vessels with resulting savings well in excess of the cost.

#### MUSKEGON HARBOR, MICH.

(H. Doc. 474, 87th Cong.)

*Location.*—Muskegon Harbor is located on the eastern shore of Lake Michigan nearly opposite and 80 miles across the lake from Milwaukee, Wis.

*Authority.*—Senate and House Public Works Committee resolutions adopted May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—Provides in general for an outer harbor formed by arrowhead breakwaters; and entrance channel 24 feet deep at entrance decreasing to 21 feet at the inner channel, thence an inner channel 21 feet deep extending to Muskegon Lake; for piers and revetments along the inner channel; and for repairing and maintaining the revetment around the old car-ferry slip.

*Navigation problem.*—The existing project depth is inadequate to accommodate vessels in the present and prospective fleet loaded to drafts commensurate with depths being provided in the Great Lakes connecting channels and the St. Lawrence Seaway.

*Recommended plan of improvement.*—Provides in general for a depth of 29 feet from deep water in Lake Michigan to a point about 1,000 feet landward of the ends of the breakwaters; thence a depth of 28 feet to the outer ends of the inner piers; thence a depth of 27 feet in the inner channel to Muskegon Lake; and for modification of the project limits to delete two triangular areas adjacent to the inner portion of the entrance channel and to reduce the project width in the inner channel from 240 feet to 200 feet.

*Estimated cost (price level of May 1960).*—

Federal.....	\$609, 000
Non-Federal.....	450, 000
<b>Total.....</b>	<b>1, 059, 000</b>

#### *Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$22, 000	\$21, 000	\$43, 000
Maintenance and operation.....	5, 000		5, 000
<b>Total.....</b>	<b>27, 000</b>	<b>21, 000</b>	<b>48, 000</b>
Annual benefits:			
Transportation savings:			
Bulk cargo traffic.....			137, 700
General cargo traffic.....			88, 300
<b>Total.....</b>			<b>226, 000</b>



*Benefit-cost ratio.*—4.7.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of aids to navigation, including suitable areas for initial and subsequent disposal of spoil and necessary retaining works therefor or the costs of such retaining works; hold and save the United States free from damages due to construction and maintenance of the improvements; and when and where needed, provide and maintain depths in berthing areas and access channels commensurate with the depths provided in the related project areas. Local interests have indicated a willingness and ability to comply with items of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The proposed improvements will provide channels with depths equivalent to those in the seaway and the Great Lakes connecting channels. The benefits amply justify the improvements.

#### LELAND HARBOR, MICH.

(H. Doc. 413, 87th Cong.)

*Location.*—On the east shore of Lake Michigan, about 40 miles by water northeast of Frankfort, Mich.

*Authority.*—House Public Works Committee resolution adopted July 31, 1957, and Senate Public Works Committee resolution adopted February 8, 1957.

*Existing project.*—The Federal navigation project, completed in 1937, provides piers about 400 feet long, converging from shore to an entrance 60 feet wide; and an entrance channel 6 feet deep, 40 feet wide, and 300 feet long.

*Navigation problem.*—There is a need for additional anchorage area, and greater protection for the locally based fishing fleet and mail-ferry boat and cruising recreational craft.

*Recommended plan of improvement.*—Construction of a breakwater about 1,000 feet long, a protected anchorage and maneuvering area about 3 acres in extent and 10 feet deep, a flared approach channel 12 feet deep with minimum width of 140 feet, and removal of the existing north pier.

*Estimated cost (price level of February 1961).*—

Federal	\$485, 000
Non-Federal	285, 000
Total	770, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$19,000	\$12,200	\$31,200
Maintenance dredging.....	2,500		2,500
Maintenance to navigation aids.....	750		750
Total.....	22,250	12,200	34,450
Annual benefits:			
Recreational.....			21,400
Harbor of refuge.....			
Recreational craft.....			10,000
Commercial craft.....			5,000
Commercial fishing.....			6,500
Total.....			42,900

*Benefit-cost ratio.*—1.2.

*Local cooperation.*—Contribute in cash 37 percent of the first cost of construction of the general navigation facilities due to benefits to recreational boating, such contribution, presently estimated at \$285,000, to be paid in a lump sum prior to initiation of construction and subject to final adjustment after actual costs have been determined; provide without cost to the United States all lands, easements, and rights-of-way necessary for construction and subsequent maintenance of the project and of aids to navigation upon the request of the Chief of Engineers, including suitable areas as may be determined by the Chief of Engineers to be required for initial and subsequent disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; hold and save the United States free from damages due to the construction and maintenance of the project; provide and maintain without cost to the United States necessary mooring facilities and utilities, including a public landing with suitable supply facilities, open to all on equal terms; the dredging of berthing areas to be commensurate with the depth of the Federal channel improvements; establish a properly constituted and competent public body empowered to cooperate financially and to provide and operate essential local facilities; reserve spaces within the anchorage and mooring facilities adequate for the accommodation of transient craft; and maintain an adequate channel for the commercial fishing fleet in the river upstream of the Federal improvement. The local interests are willing to furnish the items of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The navigation facilities are inadequate to serve locally based craft and there is a need for an adequate harbor of refuge. The committee notes the need for this improvement and that the benefits are ample to justify the project.

## LITTLE BAY DE NOC, GLADSTONE HARBOR AND KIPLING, MICH.

(H. Doc. 480, 87th Cong.)

*Location.*—Little Bay de Noc is a northerly arm of Green Bay in the northwestern part of Lake Michigan. Gladstone is on the west shore of the bay, about 7.5 miles north of Escanaba. Kipling is on the north side of Gladstone Harbor.

*Authority.*—Resolutions of the Public Works Committees of the Senate and House of Representatives adopted August 18, 1959, and June 3, 1959, respectively, and section 109 of the River and Harbor Act of 1960.

*Existing project.*—The existing Federal project, completed in 1905, provided for dredging to a depth of 19 feet the approach to the then existing ore dock at Gladstone. No funds have been expended on the project since 1911 and, since the ore dock was abandoned many years ago, the project was recommended for abandonment in House Document No. 467, 69th Congress, 1st session. No action in respect to abandonment was taken by Congress.

*Navigation problem.*—The existing locally provided channel to Kipling is inadequate for tankers calling there.

*Recommended plan of improvement.*—It is recommended that the existing project for Gladstone Harbor, Mich., be abandoned and that a new project be authorized, providing for: a channel 24 feet deep, 200 feet wide, and about 2,400 feet long from deep water in Little Bay de Noc to the Kipling waterfront, with suitable widening at the landward end to form a turning basin 550 feet wide and 24 feet deep.

*Estimated cost (price level November 1961).*—

Federal.....	\$350, 000
Non-Federal.....	19, 000
<b>Total.....</b>	<b>369, 000</b>

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$12, 900	\$900	\$13, 800
Maintenance.....	2, 000	200	2, 200
Navigation aids.....	100		100
<b>Total.....</b>	<b>15, 000</b>	<b>1, 100</b>	<b>16, 100</b>
Annual benefits: Transportation savings.....			79, 200

*Benefit-cost ratio.*—4.9.

*Local cooperation.*—Hold and save the United States free from damages due to the construction works and maintenance of the improvements; provide and maintain without cost to the United States depths in berthing areas commensurate with the depth provided in the related project area; and make terminal facilities for transfer of petroleum products at Kipling available to all on equal terms. It is the opinion of the district engineer that local interests are able and willing to meet the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of Interior: Favorable.

State of Michigan: Favorable.



*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee notes that the improvement would result in savings on transportation costs, prevent groundings of vessels, and encourage industrial development. Also, it notes the very favorable economic ratio of this project.

#### GREEN BAY HARBOR, WIS.

(H. Doc. 470, 87th Cong.)

*Location.*—Green Bay Harbor is within the mouth of the Fox River at the south end of Green Bay, an arm of Lake Michigan.

*Authority.*—Similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—Outer harbor entrance channel 10 miles long, 22 feet deep, and from 500 feet wide at outer end to 300 feet at Grassy Island; Fox River channel 22 feet deep to Chicago & North Western Railway bridge; turning basin 22 feet deep at mouth of East River; turning basin 20 feet deep above Chicago & North Western Railway bridge; and channel  $3\frac{1}{2}$  miles long, 18 feet deep, 150 feet wide from Chicago & North Western Railway bridge to DePere, terminating in a turning basin.

*Navigation problem.*—Lack of adequate depth to accommodate the vessels which will use the connecting channels and St. Lawrence Seaway and inadequate width in the lower harbor for turning vessels.

*Recommended plan of improvement.*—Provides generally for deepening the entrance channel in Green Bay to 26 feet from that depth in the bay to Grassy Island, at channel widths of 500 feet to Tail Point Light, thence 300 feet to Grassy Island; deepening the entrance channel to 24 feet from Grassy Island to a point 0.5 mile upstream at the presently authorized channel width of 300 feet; thence deepening the Fox River to 24 feet a point 1,700 feet upstream from the Chicago & North Western Railway bridge, at existing channel widths; and dredging the authorized but unconstructed turning basin at the mouth of the East River to a depth of 24 feet for a maximum width of 1,000 feet; and further provides that the uncompleted part of the work authorized in 1945 be combined with the additional work recommended herein and the whole be treated as a single work item, with estimated cost of \$4,610,000 for construction, including \$340,000 for work previously authorized, and that this combination supersede the authorization for the uncompleted portion of the work authorized by the River and Harbor Act of 1945.

*Estimated cost (price level June 1961).*—

Federal.....	\$4, 270, 000
Non-Federal.....	215, 000
Total.....	4, 485, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$159,500	\$9,900	\$169,400
Maintenance of channel.....	20,000	-----	20,000
Maintenance, aids to navigation.....	1,600	-----	1,600
Total.....	181,000	9,900	191,000
Annual benefits: Transportation savings.....	-----	-----	478,000

*Benefit-cost ratio.—2.5.*

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way for construction and subsequent maintenance, including suitable areas for initial and subsequent disposal of spoil and necessary retaining works therefor or the costs of such retaining works; hold and save the United States free from damages due to the construction and maintenance of the improvements; when and where necessary, provide and maintain depths between the new channel limits and terminal facilities commensurate with related project depths; and accomplish such alterations as required in sewer, water supply, drainage and other utilities. Local interests have indicated willingness and ability to comply with these items of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

State of Wisconsin: Favorable.

*Comments of the Bureau of the Budget.—No objection.*

*Remarks.*—The proposed improvement will permit loading of the larger vessels to full draft which will result in reduced transportation costs. The project is amply justified.

**KENOSHA HARBOR, WIS.**

(H. Doc. 496, 87th Cong.)

*Location.*—Kenosha Harbor, Wis., on the western shore of Lake Michigan about 35 miles south of Milwaukee and 54 miles north of Chicago, Ill., is at the mouth of Pike Creek in the city of Kenosha. The area tributary to Kenosha Harbor includes Kenosha County, parts of Racine and Walworth Counties, and a small area along the northern boundary of Illinois.

*Authority.*—Full response to House Committee on Public Works resolution adopted July 31, 1957; partial response to similar resolutions of Senate and House Committees on Public Works adopted May 18, 1956 and June 27, 1956, respectively; and in partial response to Senate Public Works Committee resolution adopted April 30, 1957.

*Existing project.*—The existing Federal project for Kenosha Harbor, completed in 1959, provides for (a) a detached breakwater 796 feet long, northeast of the harbor; (b) two parallel piers about 250 feet apart along the entrance channel, 1,077 feet and 1,872 feet in length for the north and south piers, respectively; (c) an entrance channel generally 400 feet wide lakeward from the piers and 200 feet wide between the piers, the channel being 2,750 feet long and 21 feet deep from that depth in the lake to an interior basin; (d) an interior basin 21 feet deep; and (e) a channel 21 feet deep, 70 feet wide, and



475 feet long extending northwest from the basin. The lake approach to the entrance channel has been deepened to 23 feet under the general provisions of section V of the River and Harbor Act of March 4, 1951.

*Navigation problem.*—Kenosha Harbor is a part of the Great Lakes navigation system which includes improvements to connecting channels between the lakes and to shipping and receiving harbors. Present harbor depths of 21 feet are not commensurate with the controlling depths currently being provided in the system and with those of the St. Lawrence Seaway to accommodate the vessels carrying oversea general cargo.

*Recommended plan of improvement.*—A lake approach channel 800 feet wide and 27 feet deep from the detached breakwater lakeward for a distance of about 2,800 feet; an approach channel 26 feet deep between the detached breakwater and the outer end of the north pier; and an entrance channel and inner basin 25 feet deep, exclusive of the northwesterly extension.

*Estimated cost (price level of July 1961).*—

Federal.....	\$673, 000
Non-Federal.....	-----
<b>Total.....</b>	<b>673, 000</b>

*Project economics.*—

Annual charges (Federal):	
Interest and amortization.....	\$25, 200
Maintenance.....	5, 000
<b>Total.....</b>	<b>30, 200</b>
Annual benefits: Transportation savings in oversea general cargo.....	47, 300

*Benefit-cost ratio.*—1.6.

*Local cooperation.*—Hold and save the United States free from damages that may result from construction and maintenance of the improvement; and maintain without cost to the United States depths in berthing areas when and as required at docks adjacent to the area to be improved, commensurate with the recommended project depths.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Wisconsin: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The proposed increase in project depths will facilitate more efficient loading of the larger modern vessels, with resultant savings well in excess of the costs.

#### MANITOWOC HARBOR, WISC.

(H. Doc. 479, 87th Cong.)

*Location.*—West shore of Lake Michigan about 79 miles north of Milwaukee, Wis.

*Authority.*—Similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—The existing Federal project provides for an outer harbor protected by breakwaters with an entrance 425 feet wide; a channel 21 feet deep and 425 feet wide from deep water in the lake to the breakwaters, thence 650 feet wide through the outer



harbor to the river mouth; a channel 21 feet deep at varying widths for a distance of 1.7 miles up the Manitowoc River; removal of the old stub pier at the river entrance; and an approach channel 21 feet deep in the outer harbor to a proposed city terminal south of the south breakwater. The lake approach has been deepened to 23 feet under the general authority provided in section 5 of the River and Harbor Act of March 4, 1915.

*Navigation problem.*—Existing project dimensions are not adequate to accommodate present and prospective bulk cargo vessels serving the harbor.

*Recommended plan of improvement.*—Provide for an approach channel 25 feet deep and 800 feet wide from deep water in the lake to the breakwater entrance, a distance of about 2,600 feet; a depth of 23 feet over a width of 800 feet in the outer harbor, thence over the existing project widths in the river to Eighth Street; a depth of 22 feet over existing widths from Eighth Street to the upstream limit of the project; and elimination of the authorized channel in the south part of the outer harbor.

*Estimated cost (price level of July 1961).*—

Federal.....	\$719, 000
Non-Federal.....	193, 000
Total.....	912, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$26, 300	\$8, 900	\$35, 200
Maintenance dredging.....	3, 000		3, 000
Maintenance navigation aids.....	300		300
Total.....	29, 600	8, 900	38, 500
Annual benefits: Transportation savings.....			63, 600

*Benefit-cost ratio.*—1.7.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for initial dredging and subsequent maintenance of the improvement and for aids to navigation, including suitable areas for initial and subsequent disposal of spoil and necessary retaining works therefor or the costs of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvement; provide and maintain without cost to the United States depths in berthing areas and local access channels serving the terminals commensurate with the depths provided in the related project areas; and accomplish and maintain without cost to the United States such alterations as may be required by the Chief of Engineers in sewer, water supply, drainage, and other utility facilities. Local interests have indicated willingness and ability to comply with the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Wisconsin: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The recommended improvement will meet the needs of existing and prospective commerce, and provide the needs of navigation anticipated for the prospective development of the harbor.

## MILWAUKEE HARBOR, WIS.

(H. Doc. 134, 87th Cong.)

*Location.*—Milwaukee Harbor is located on the west shore of Lake Michigan, 85 miles north of Chicago, Ill.

*Authority.*—Resolutions of the Senate and House Public Works Committees, adopted May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—Provides for two breakwaters, 19,625 feet in length, with an opening 500 feet wide; two piers at the Milwaukee River mouth, 358 to 552 feet apart; an entrance channel 21 feet deep, 2,850 feet long, and 600 feet wide outside the piers; together with various widths and depths.

*Navigation problem.*—Major problem is lack of adequate depth to accommodate vessels which will utilize the connecting channels and the St. Lawrence Seaway.

*Recommended plan of improvement.*—Provides for (a) an approach channel 30 feet deep and 800 feet wide, narrowing to 300 feet through the breakwater opening; (b) a depth of 28 feet in the entrance channel to the inner end of the piers, over existing project widths, but not nearer than 50 feet from either pier; (c) a depth of 28 feet in the outer harbor south of the entrance channel to East Bay Street extended, between limits 50 feet east of the pierhead line and 400 feet west of the breakwater; (d) and a depth of 27 feet in the Milwaukee River to within 100 feet of the centerline of the bridge at mile 0.34, over existing project widths, and the Kinnickinnic River to widths 160 feet of the centerline of the bridge at mile 1, not nearer than 75 feet from adjacent docks.

*Estimated cost (price level of January 1960).*—

Federal.....	\$4, 029, 000
Non-Federal.....	627, 000
<b>Total.....</b>	<b>4, 656, 000</b>

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$150, 000	\$24, 800	\$174, 800
Maintenance.....	16, 000		16, 000
<b>Total.....</b>	<b>166, 000</b>	<b>24, 800</b>	<b>190, 800</b>
Annual benefits: Transportation savings.....			1, 130, 000

*Benefit-cost ratio.*—5.9.

*Local cooperation.*—Local interests must agree to: (a) Hold and save the United States free from damages due to the construction and maintenance of the improvements; (b) accomplish all necessary alterations to existing structures and utility facilities; and (c) when and where necessary, provide and maintain depths and terminal facilities and in berthing areas commensurate with related project depths. Local interests have indicated willingness and ability to provide local requirements.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

State of Wisconsin: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.—*These improvements are necessary to allow full loading of the large vessels now serving the harbor, to provide for the increased utilization of large vessels expected in the future, and to serve the expanding foreign and domestic commerce. The committee notes the very favorable benefit-cost ratio.

#### CHICAGO HARBOR, ILL.

(H. Doc. 485, 87th Cong.)

*Location.—*Chicago Harbor is near the south end of Lake Michigan, 14 miles northerly of the Illinois-Indiana State line, on the southwestern shore of the lake.

*Authority.—*Similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively.

*Existing project.—*The existing Federal project for Chicago Harbor generally provides for an inner breakwater, in two sections, enclosing an inner basin of about 224 acres; an exterior breakwater in three sections enclosing an outer basin of about 900 acres; maintenance dredging to a depth of 21 feet of a portion of the inner basin and also of the entrance to Chicago River to Rush Street over a varying width; and maintenance of a section of the north pier. The existing deep-draft Federal project for Chicago River generally provides for maintenance dredging to 21 feet in the main river, the North Branch, the North Branch Canal, and the North Branch turning basin, all to within 20 feet of existing docks.

*Navigation problem.—*Existing project depths in the outer harbor are not adequate to permit vessels in the oversea traffic to take full advantage of the depth being provided in the connecting channels and the St. Lawrence Seaway.

*Recommended plan of improvement.—*Provide for a lake approach channel 800 feet wide and 29 feet deep from the breakwater lakeward for a distance of about 6,600 feet and a channel and maneuver area inside the harbor entrance with a maximum width of 1,300 feet and a depth of 28 feet.

*Estimated cost (price level of July 1961).—*

Federal.....	\$1, 505, 000
Non-Federal.....	None
Total.....	1, 505, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$57, 000	0	\$57, 000
Maintenance.....	11, 000	\$1, 000	12, 000
Total.....	68, 000	1, 000	69, 000
Annual benefits: Transportation savings.....			423, 000



*Benefit-cost ratio.*—6.1.

*Local cooperation.*—Hold and save the United States free from damages that may result from construction and maintenance of the improvement; and maintain, without cost to the United States, depths in berthing areas serving the public terminal commensurate with the recommended project depths. Local interests have indicated a willingness and ability to comply with the terms of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The proposed improvement would permit vessels in the oversea traffic to take full advantage of the depth provided in the connecting channels and the St. Lawrence Seaway. The project is amply justified.

#### CALUMET HARBOR AND RIVER, ILL. AND IND.

(H. Doc. 581, 87th Congress)

*Location.*—Calumet Harbor is at the south end of Lake Michigan, on the State line between Illinois and Indiana.

*Authority.*—Interim report is in partial response to similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—The existing Federal project for Calumet Harbor and River provides for an outer harbor protected by a breakwater 12,500 feet long; an approach channel 3,200 feet wide and 29 feet deep; an outer harbor channel and anchorage 3,000 feet wide and 28 feet deep; a channel in the river 290 feet wide and 27 feet deep up to the Elgin, Joliet & Eastern Railway Bridge, thence at least 200 feet wide and 25 feet deep to 111th Street, 23 feet to 114th Street, 21 feet at 122d Street, and 21.5 feet to and including turning basin No. 5; widening and straightening the river, except through the rock cut, to within 20 feet of bulkhead lines; five turning basins along the river; and closing the existing gap between the breakwaters. The existing project for Lake Calumet provides for dredging to a depth of 21 feet an area 670 feet wide and 3,000 feet long at the south end of the lake and an entrance channel 300 feet wide from Calumet River at turning basin No. 5.

*Navigational problem.*—Existing project depths are not adequate to allow vessels calling at points along the river and in Lake Calumet to be loaded to the drafts permitted by the Great Lakes connecting channels and the St. Lawrence Seaway. Widening in the rock section of the river, enlargement of turning basins and extension of the existing project are needed for safe navigation and development of the harbor.

*Recommended plan of improvement.*—Provides for: a depth of 27 feet in earth and 28 feet in rock over a minimum width of 200 feet in Calumet River from the Elgin, Joliet, and Eastern Railway Bridge to turning basin No. 5; widening the channel through the rock section of Calumet River, together with the presently authorized widening and straightening of the river, all to a depth of 27 feet in earth and 28 feet in rock; a depth of 27 feet over the authorized limits of turning basin No. 1 on Calumet River; enlarging turning basin No. 5, and

deepening the enlarged basins to 27 feet; elimination of turning basins Nos. 2 and 4; a depth of 27 feet within authorized limits to Lake Calumet and its entrance channel; and extending the existing project limits in Lake Calumet 3,000 feet northward at a width of 1,000 feet and a depth of 27 feet. Further, that the uncompleted work authorized in 1935 for the related river section be combined with the additional work now recommended for that section (exclusive of turning basins Nos. 2 and 4) and the whole be treated as a single further improvement, with estimated cost of \$13,479,000 for construction, including \$2,015,000 for work previously authorized and \$11,464,000 for additional work now recommended, and that this combination supersede the authorization for construction of the pertinent uncompleted portion of the work authorized by the River and Harbor Act of 1935.

*Estimated cost (price level of January 1961).—*

Federal.....	\$11, 464, 000
Non-Federal.....	12, 081, 000
<b>Total.....</b>	<b>23, 545, 000</b>

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$433, 000	\$560, 000	\$993, 000
Maintenance dredging.....	17, 000		17, 000
<b>Total.....</b>	<b>450, 000</b>	<b>560, 000</b>	<b>1, 010, 000</b>
Annual benefits: Transportation savings.....			2, 393, 000

*Benefit-cost ratio.—2.4.*

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the projects, including suitable areas required for initial disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvements; provide and maintain without cost to the United States depths in berthing areas commensurate with depths provided in the related project areas; accomplish without cost to the United States such alterations as may be required in docks, bulkheads, submarine utility facilities, and other structures; provide such bridge protection as may be required; and provide adequate bulkheads where required in connection with enlargement of the river channel and turning basins or, in lieu of such bulkheads, furnish releases saving the United States harmless against any claims for damages from erosion, bank losses, or other consequences of the work; and provided further that work on any separable feature may be undertaken independently of any other, whenever funds for that feature are available and the pertinent local cooperation has been furnished.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

State of Illinois: Favorable.

State of Indiana: Favorable.

*Comments of the Bureau of Budget.*—No objection.

*Remarks.*—This harbor is an integral part of the system of Great



Lakes harbors and connecting channels. The improvement as proposed is necessary and justified to permit full loading of the large vessels.

#### NEW BUFFALO HARBOR, MICH.

(H. Doc. 481, 87th Cong.)

*Location.*—New Buffalo Harbor is at the mouth of Galien River on the southeast shore of Lake Michigan, about 10 miles northeast of Michigan City, Ind., and 45 miles east of Chicago, Ill.

*Authority.*—Resolutions adopted by the Public Works Committee of the U.S. Senate and House of Representatives on June 20, 1957, and July 16, 1958, respectively.

*Existing project.*—A Federal navigation project adopted in 1852 provided for a revetted entrance channel 12 feet deep and 200 feet wide. Expenditures of \$83,000 to 1885, when all work was discontinued, resulted in a partially revetted channel 6 feet deep, 40 feet wide, and 1,400 feet long, which constitutes substantially the present channel. Since 1954 local interests have spent about \$58,000 for a timber jetty north of the entrance and channel improvements, and about \$270,000 for moorage facilities. They have under construction, or are planning, additional facilities at an estimated cost of \$144,000. A public ramp for boat launching is operated by the village of New Buffalo.

*Navigation problem.*—The entrance lacks protection against lake storms and the channel is subject to shoaling from shifting sandbars resulting from southerly littoral drift. These conditions render small-craft navigation hazardous. Local attempts at channel maintenance have been inadequate. Existing project provisions are not suitable for present and future needs.

*Recommended plan of improvement.*—Abandon the existing inactive project and construct new project providing for construction of two breakwaters, one extending lakeward for 1,400 feet from the shore northeast of the Galien River mouth, and the other for 860 feet from the shore on the southwest side; and dredging of a channel 10 feet deep, 80 to 180 feet wide, and about 850 feet long from the lake to the river mouth, thence 8 feet deep and 80 feet wide for 1,250 feet in the river.

*Estimated cost (price level of August 1961).*—

Federal.....	\$667, 000
Non-Federal.....	615, 000
Total.....	1, 282, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$25, 500	\$28, 000	\$53, 500
Maintenance.....	21, 000		21, 000
Maintenance, aids to navigation.....	500		500
Total.....	47, 000	28, 000	75, 000
Annual benefits:			
Damages prevented.....			32, 400
Recreational boating.....			49, 200
Reduced local maintenance.....			16, 000
Increased commercial fish catch.....			4, 500
Total.....			102, 100



*Benefit-cost ratio.*—1.4.

*Local cooperation.*—Contribute in cash 48 percent of the first cost of construction of the general navigation facilities due to recreational boating benefits, such contribution, presently estimated at \$615,000, to be paid in a lump sum prior to initiation of construction, subject to final adjustment after actual costs have been determined; provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and for aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil in a stockpile for beach nourishment; hold and save the United States free from damages due to the construction works and maintenance of the improvements; provide and maintain without cost to the United States necessary mooring facilities and utilities, including a public landing with suitable supply facilities open to all on equal terms, and including dredging of berthing areas to depths commensurate with the related project depth; and preserve mooring facilities adequate for the accommodation of transient craft. The net cost to the United States for the recommended improvements is estimated at \$667,000 for construction and \$21,000 annually for maintenance. The Michigan State Waterways Commission has expressed its support for the improvements and has offered to provide any required local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The proposed improvements would provide a needed harbor of refuge, increase commercial fishing and recreational boating activities, and reduce boat damages. The local cash contribution, due to the recreational benefits, follows existing policy on this matter.

## CASEVILLE HARBOR, MICH.

(H. Doc. 64, 87th Cong.)

*Location.*—Caseville Harbor, about 40 miles northeasterly of Bay City, Mich., is at the mouth of Pigeon River on the east shore of Saginaw Bay, an arm of Lake Huron.

*Authority.*—Resolution of Public Works Committee, House of Representatives, adopted April 24, 1945.

*Existing project.*—There is no existing Federal project at Caseville.

*Navigation problem.*—Navigation by light-draft vessels cruising in the vicinity of the mouth of Pigeon River is adversely affected by frequent, severe northerly and northeasterly storms sweeping across long expanses of open water in Lake Huron. The presence of rocky reefs extending from the shore and from adjacent islands in the area constitutes an additional hazard to small craft cruising near shore and greatly increases the sailing distance between sheltered areas.

*Recommended plan of improvement.*—Provides for constructing a breakwater, 1,300 feet long, extending northwesterly from the bay shore at the north side of the mouth of Pigeon River; and dredging an entrance channel 10 feet deep and 500 feet wide from that depth in Saginaw Bay, decreasing to 80 feet in width at the outer end of

the breakwater and extending riverward 100 feet at the same depth; thence a channel 8 feet deep and 80 feet wide to the river mouth, decreasing to 60 feet in width and extending upstream approximately 1,000 feet, with widening to 80 feet in the upper 300-foot reach to serve as a turning basin, all at the same depth.

*Estimated cost (price level of August 1959).—*

Federal.....	\$327, 000
Non-Federal.....	327, 000
Total.....	654, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$12, 000	\$14, 000	\$26, 000
Maintenance and operation.....	2, 500		2, 500
Maintenance navigation aids.....	300		300
Total.....	14, 800	14, 000	28, 800
Annual benefits:			
Recreational boating.....			36, 700
Harbor of refuge.....			2, 000
Total.....			38, 700

*Benefit-cost ratio.—1.3.*

*Local cooperation.*—Local interests must agree to: (a) contribute in cash 50 percent of the first cost of construction of the general navigation facilities comprising the channel and breakwater, such contribution presently estimated at \$327,000, to be paid in a lump sum prior to initiation of construction, subject to final adjustment after actual costs have been determined; (b) provide without cost to the United States all lands, easements, and rights-of-way necessary for construction and maintenance of the project; (c) hold and save the United States free from damages due to the construction and maintenance of the project; (d) provide and maintain without cost to the United States necessary mooring facilities, and utilities, including a public landing with suitable supply facilities, open to all on equal terms; the dredging of berthing areas to be commensurate with the depth of the Federal channel improvements; (e) establish a properly constituted and competent public body empowered to cooperate financially and to provide and operate essential local facilities; and (f) reserve spaces within the anchorage and mooring facilities adequate for the accommodation of transient craft; and provided further that, if it is determined in detailed studies that spoil disposal areas are needed, local interests agree to furnish, upon request of the Chief of Engineers, and without cost to the United States, any such areas required including such dikes, bulkheads and embankments as may be necessary, for the initial dredging and subsequent maintenance. Local interests have indicated willingness to furnish local cooperation.

*Comments of State and Federal agencies.—*

Department of Interior: Favorable.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The proposed project provides for the needs of existing and prospective light-draft craft operating in this area. The com-



mittee notes that local interests are required to contribute one half of the cost of the project due to recreational boating benefits which is in accordance with existing policy.

# SAGINAW RIVER, MICH.

(H. Doc. 544, 87th Cong.)

*Location.*—In Michigan on the east shore. Saginaw River flows 22 miles northward to the head of Saginaw Bay, a southwestern arm of Lake Huron.

*Authority.*—Similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—The Federal project provides for an entrance channel 350 feet wide and 24 feet deep in the river to the Detroit & Mackinac Railway bridge, thence 22 feet deep to Sixth Street, Saginaw, and thence 16.5 feet deep to the head of the river at Green Point, a total distance of 29 miles; and three turning basins: one 20 feet deep at Essexville, another 20 feet deep at Carrollton, and the third in Saginaw 15 feet deep. Also provides for elimination from the project of the existing entrance channel in the bay upon completion of the new channel.

*Navigation problem.*—Existing project dimensions are inadequate to accommodate present and prospective bulk- and general-cargo vessels serving the terminals along the river.

*Recommended plan of improvement.*—Provide for a channel 27 feet deep and 350 feet wide from deep water in Saginaw Bay for a distance of 14 miles to the angle in the channel near the river mouth; thence a channel 26 feet deep and 200 feet wide for a distance of 0.4 of a mile to the river mouth; thence a channel 25 feet deep and 200 feet wide for 2.8 miles up the river to the Detroit & Mackinac Railway bridge; a depth of 25 feet in the Essexville turning basin over a width of 600 feet, including a triangular extension of 500 feet at the downstream end; a turning basin 22 feet deep, 650 feet wide and 6.2 acres in area, at river mile 8.8 near the airport; a depth of 22 feet over the present width of 200 feet for a distance of 2,800 feet in the channel upstream from the Sixth Street Bridge; and a turning basin 20 feet deep, 650 feet wide, and 6.2 acres in area upstream of the Sixth Street Bridge, at about mile 17.1.

*Estimated cost (price level of January 1962).*—

Federal.....	\$4, 780, 000
Non-Federal.....	110, 000
Total.....	4, 890, 000



*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$179,300	\$5,100	\$184,400
Maintenance dredging.....	32,000	-----	32,000
Maintaining aids to navigation.....	3,000	-----	3,000
Total.....	214,300	5,100	219,400
Annual benefits:			
Transportation savings.....	-----	-----	275,700
Vessel turning cost savings.....	-----	-----	19,100
Total.....	-----	-----	294,800

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for initial dredging and subsequent maintenance of the improvement and for aids to navigation, including suitable areas for initial and subsequent disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the costs of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvements; provide and maintain without cost to the United States depths in berthing areas and dock approaches commensurate with the depths provided in the related project areas; and accomplish and maintain without cost to the United States such alterations as may be required by the Chief of Engineers in submarine utility facilities. Local interests have indicated they are willing and able to comply with the items of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The proposed improvements would permit use of larger vessels with resultant transportation savings on bulk and general cargo. Extension of the deepdraft channel upstream and provision of turning basins will encourage industrial development in the adjacent areas.

## ROUGE RIVER, MICHIGAN

(H. Doc. 509, 87th. Cong.)

*Location.*—Rouge River is located in southeastern Michigan and it joins the Detroit River between the cities of Detroit and River Rouge, Mich.

*Authority.*—Partial response to similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively. It is also in partial response to resolution of the Committee on Public Works, House of Representatives adopted on July 21, 1950.

*Existing project.*—Provides for a main channel 3 miles in length from the Detroit River through the short-cut canal to the turning basin just above Dix Avenue Bridge all 21 feet deep; and an older side channel from the Detroit River 1½ miles in length joining the main

channel immediately upstream of the Detroit Toledo & Ironton Railroad bridge of varying depths from 17 to 25 feet.

*Navigation problem.*—Present channel depths are inadequate to permit efficient use of modern vessels.

*Recommended plan of Improvement.*—Provides for deepening 25 feet and widening to suitable widths the main channel of the Rouge River from the Detroit River to just below the Jefferson Street Bridge; a turning basin at the junction of the old channel and the main channel 25 feet deep; and maintenance of those portions of the existing project outside the 25-foot channel limits.

*Estimated cost (price level of April 1962).*—

Federal.....	\$257, 000
Non-Federal.....	1, 240, 000
<b>Total.....</b>	<b>1, 497, 000</b>

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$9, 900	\$57, 700	\$67, 600
Increased maintenance.....	5, 000	5, 000	10, 000
<b>Total.....</b>	<b>14, 900</b>	<b>62, 700</b>	<b>77, 600</b>
Annual benefits: Transportation savings.....			157, 300

*Benefit-cost ratio.*—2.0.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for construction of the improvements upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial disposal of spoil, and also necessary dikes, bulkheads, and embankments therefor or the costs of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvements; provide and maintain at local expense adequate terminal and transfer facilities open to all on equal terms, to accommodate the commerce to be served by the improved channel; provide and maintain without cost to the United States depths in berthing areas commensurate with the depths provided in the related project areas; accomplish and maintain without cost to the United States such alterations as may be required in docks, bulkheads, and other structures, and take such measures as may be necessary to assure stability of banks adjacent to the project channel; and provide without cost to the United States such bridge protection as may be required.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The proposed improvement would permit more efficient use of modern vessels and is considered practicable and economically justified. The committee notes that the non-Federal cost is much greater than the Federal cost and that local interests have indicated willingness to meet the requirements of local cooperation.



## HURON HARBOR, OHIO

(H. Doc. 165, 87th Cong.)

*Location.*—Huron Harbor, Ohio, is at the mouth of the Huron River on the south shore of Lake Erie, about 47 miles west of Cleveland, Ohio.

*Authority.*—Interim report in partial response to resolutions of the Committees on Public Works of the U.S. Senate and House of Representatives, adopted May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—The existing Federal project provides for a channel from deep water in Lake Erie to the river entrance 25 deep in soft material and 26 feet deep in hard material; a pier on the west side of the channel and a breakwater on the east side of the channel, \$3,170 feet and 1,450 feet long, respectively; and enlargement but not maintenance of a turning basin 19 feet deep adjacent to slip No. 2. Local interests have dredged and maintained the river channel and turning basin above the limits of Federal maintenance.

*Navigation problem.*—The present controlling depths in Huron Harbor are insufficient to accommodate modern vessels loaded with iron ore, grain, and coal, and desirous of using depths available in the connecting channels and the St. Lawrence Seaway. The turning basin at the upstream end of deep-draft navigation is too small for safe use by vessels larger than class 5. Storms from the northeasterly direction create turbulence in the harbor which hampers loading operations in the coal slip. These storms also interfere with vessels entering and leaving the harbor. The entrance channel is narrow and exposed and the stopping or checking distance is insufficient for the large vessels entering the confined river channel.

*Recommended plan of improvement.*—Provides for an approach channel 400 feet at the outer end and 300 feet at the inner end and 29 feet deep extending from the lake to a point opposite the outer end of the east breakwater; an entrance channel 28 feet deep in soft material and 29 feet in hard, 300 feet wide at the outer end and 150 feet at the inner end, extending from the outer end of the east breakwater to slip No. 1 of the New York, Chicago & St. Louis Railroad Co.; a river channel 27 feet deep in soft and 28 feet in hard material, 120 feet wide at the outer end and 350 feet at the inner end extending from slip No. 1 to the turning basin; a turning basin 750 feet wide and 22 feet deep in hard and 21 feet in soft material; a detached breakwater 1,575 feet long approximately 2,000 feet lakeward of the outer end of the west pier; and abandonment of the lakeward end of the existing approach channel not included in the plan.

*Estimated cost (price level of August 1959).*—

Federal.....	\$8, 557, 000
Non-Federal.....	1, 080, 000
<b>Total.....</b>	<b>9, 637, 000</b>



*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	319, 500	53, 600	373, 100
Maintenance and operation.....	59, 500	<sup>1</sup> —13, 000	46, 500
Maintenance, navigation aids.....	2, 200	—	2, 200
Total.....	381, 200	40, 600	421, 800
Annual benefits:			
Transportation savings.....	—	—	443, 000
Elimination of delays.....	—	—	6, 000
Total.....	—	—	449, 000

<sup>1</sup> Includes reduction of \$18,000 in non-Federal maintenance in the river channel and turning basin and an increase of \$5,000 non-Federal maintenance for slips Nos. 1 and 2.

*Benefit-cost ratio.—1.1.*

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project; hold and save the United States free from damages due to the construction and maintenance of the improvements; when and where necessary, dredge the areas between the Federal improvement and terminal facilities to adequate depths; and, regulate mooring to any dock, bulkhead, or other structure on the west side of the river, to prevent interference with the turning and passage of vessels. Local interests have indicated willingness and ability to provide requirements.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

State of Ohio: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.*—The committee notes that the proposed improvements are desirable for existing and prospective vessel traffic and are economically justified.

## CLEVELAND HARBOR, OHIO

(H. Doc. 527, 87th Cong.)

*Location.*—South shore of Lake Erie at mouth of Cuyahoga River.

*Authority.*—This interim report is in partial response to similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—The existing Federal project provides for an outer harbor, 5 miles long, 1,600 to 2,400 feet wide, protected by breakwaters; a main entrance 700 feet wide; two parallel piers 325 feet apart at the mouth of Cuyahoga River; a depth of 29 feet through the lake approach channel, depths of 19 to 28 feet in the outer harbor, and a depth of 27 feet up the river to the site of the former New York Central swing bridge, thence 23 feet to mile 5.8 in Cuyahoga River, with a turning basin 18 feet deep at mile 4.8; depths of 27 and 21 feet in Old River; and Federal participation in the cost of replacing seven railroad bridges over the Cuyahoga River, and one railroad bridge and one highway bridge over Old River.

*Navigation problem.*—Existing project depths are not adequate to permit vessels in the oversea general cargo and newsprint commerce

calling at terminals in the east basin of the outer harbor section to load to the maximum safe drafts permitted by the Great Lakes connecting channels and St. Lawrence Seaway projects.

*Recommended plan of improvement.*—Provide for plan A, a depth of 27 feet in an area extending easterly about 3,800 feet from the existing 28-foot project area and southerly from the existing maintenance line on the north to a limit 75 feet north of the harbor line on the south, easterly of a line 800 feet east of the west end of the east breakwater, and 28 feet westerly of the line; and provide for plan B, a depth of 25 feet in a dock approach channel to the Nicholson Cleveland Terminal Co. pier, from the 25-foot depth contour to a limit 75 feet north of the pierhead line, 400 feet wide at the shoreward end and flared toward the lake. It is further recommended that when the necessary conditions of local cooperation for either plan A or plan B have been fulfilled, construction may be initiated on that plan, irrespective of the status of local cooperation for the other plan; the uncompleted 25-foot channel through the east basin, authorized by the River and Harbor Act of July 3, 1958, be combined with the additional work recommended herein for plan A and treated as a single item of work; and the authority for dredging to 19 feet with provisional dredging to 23 feet in the remaining portion of the east basin and for dredging the uncompleted portion of the channel in Cuyahoga River at the upstream limit of the Federal project be eliminated from the project.

*Estimated cost (price level November 1961).*—

	Plan A	Plan B	Total, plans A and B
Federal.....	\$828,000	\$60,000	\$888,000
Non-Federal.....	100,000	82,000	182,000
Total.....	928,000	142,000	1,070,000

*Project economics.*—

	Plan A			Plan B		
	Federal	Non-Federal	Total	Federal	Non-Federal	Total
Annual charges:						
Interest and amortization.....	\$31,700	\$4,300	\$26,000	\$2,400	\$3,800	\$6,200
Maintenance dredging.....	15,000	2,000	17,000	5,000	2,500	7,500
Aids to navigation.....				300		300
Total.....	46,700	6,300	53,000	7,700	6,300	14,000
Annual benefits: Transportation savings:						
General cargo.....			252,000			
Newsprint.....						236,000
Benefit-cost ratio.....		4.8			16.9	

*Local cooperation.*—Hold and save the United States free from damages due to the construction and maintenance of the improvement; when and where necessary, dredge the areas between the channel limits and terminal facilities commensurate with the adjacent



Federal project depth; provide the necessary terminal facilities to accommodate prospective commerce considered in the report of the district engineer; and control operations of the Burke Lakefront Airport to permit free and unrestricted navigation use of the west side of Lederer terminal and terminals westerly therefrom and of the Nicholson Cleveland terminal. The city of Cleveland and transportation interests directly concerned have indicated their willingness and ability to meet requirements of local cooperation.

*Comments of State and Federal agencies.*—

Department of Interior: Favorable.

State of Ohio: Favorable.

*Comments of Bureau of the Budget.*—No objection.

*Remarks.*—The proposed improvements will permit loading of the larger vessels to the full draft permitted by the St. Lawrence Seaway and Great Lakes connecting channel projects. The committee notes that the project is amply justified.

#### GREAT LAKES HARBORS—INTERIM REPORT ON CONNEAUT HARBOR, OHIO

(H. Doc. 415, 87th Cong.)

*Location.*—At the mouth of Conneaut River on the south shore of Lake Erie, about 73 miles northeast of Cleveland, Ohio.

*Authority.*—In partial response to similar resolutions adopted by the Public Works Committee of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively. It is also in full response to a House committee resolution adopted April 13, 1948, and in partial response to a House committee resolution adopted June 3, 1959.

*Existing project.*—Provides in general for two breakwaters totaling 9,640 feet in length, with an entrance channel 600 feet wide, and a gap in the west breakwater 100 feet wide; and east pier 1,008 feet long; a depth of 25 feet in soft and 26 feet in hard material in the eastern part of the outer harbor; and a depth of 20 feet over the triangular western part.

*Navigation problem.*—The existing channel dimension will not accommodate existing and prospective Great Lakes bulk vessels; there is a need to eliminate dangerous crosscurrents in the outer harbor; and there is a need for an outer harbor channel for commercial fishing craft.

*Recommended plan of improvement.*—Provides in general for depths of 28 to 29 feet in the eastern part of the outer harbor; depths of 22 to 23 feet in the western part of the outer harbor; depth of 27 to 28 feet for a distance of 2,450 feet in the Conneaut River with widths varying from 300 to 180 feet; removal of the east pier and modifications of the southern outer harbor limits; extension of the east breakwater; an access channel 8 feet deep, 200 to 250 feet wide from the outer harbor to the city dock; that the uncompleted part of the authorized work be combined with work recommended and be treated as a single improvement; and provides further that the work may be accomplished on the main harbor or the city dock channel independently of the other.



*Estimated cost (price level, January 1961).—*

	Main harbor	Channel to city dock	Total
Federal.....	\$6,060,000	\$119,000	\$6,179,000
Non-Federal.....	180,000	5,200	185,200
Total.....	6,240,000	124,200	6,364,200

*Project economics.—*

	Main harbor		
	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$231,300	\$8,400	\$239,700
Maintenance and operation.....	52,000	—12,400	39,600
Total.....	283,300	—4,000	279,300
	Channel to city dock		
Interest and amortization.....	\$4,400	\$300	\$4,700
Maintenance and operation.....	10,200	500	10,700
Total.....	14,600	800	15,400
		Main harbor	Channel to city dock
<b>Annual benefits:</b>			
Delays and damages prevented.....		\$54,000	-----
Savings in transportation.....		1,313,000	-----
Commercial fishing.....			\$40,400
Total.....		1,367,000	40,400

*Benefit-cost ratio.*—Main harbor, 4.9; channel to city dock, 2.6.

*Local cooperation.*—Provide all lands, easements, and rights-of-way; hold and save the United States free from damages; provide and maintain depths in berthing areas commensurate with related project areas; and accomplish alterations as required. Local interests have indicated willingness and ability to meet the requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Ohio: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The proposed improvements will accommodate existing Great Lakes bulk vessels and provide an access channel for commercial fishing craft. The committee notes that the projects are amply justified and that work can be accomplished on the main harbor or the city dock channel independently of the other.

ERIE HARBOR, PA.

(H. Doc. 340, 87th Cong.)

*Location.*—Erie Harbor, Pa., is located on the south shore of Lake Erie about 78 miles southwest of Buffalo, N.Y., and is in a landlocked bay formed by Presque Isle Peninsula and the mainland.

*Authority.*—Similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—The existing Federal project provides for piers and a breakwater at the harbor entrance; an entrance channel 29 feet deep; a basin and channel 28 to 29 feet deep extending within 50 feet of the harbor line opposite the iron ore dock; two basins, one 21 feet deep and the other 18 feet deep; and an inner channel and basin 23 feet deep. Local interests constructed part of an original breakwater and have provided terminal facilities, access channels, and slips for deep-draft vessels.

*Navigation problem.*—Harbor depths are inadequate for traffic now using the St. Lawrence Seaway and Great Lakes connecting channels.

*Recommended plan of improvement.*—Provides for a depth of 27 feet in soft material and 28 feet in hard material in the area in front of the Duquesne marine terminal; and further provides that the uncompleted part of the work authorized in 1935 be combined with the additional work recommended herein and the whole be treated as a single work item, with estimated cost of \$699,000 for construction, including \$28,000 for work previously authorized, and that this combination supersede the authorization for the uncompleted portion of the work authorized by the River and Harbor Act of 1935.

*Estimated cost (October 1960 price level).*—

Federal.....	\$671, 000
Non-Federal.....	-----
<b>Total.....</b>	<b>671, 000</b>

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	26,000	-----	26,000
Maintenance and operation.....	-----	-----	-----
<b>Total.....</b>	<b>26,000</b>	-----	<b>26,000</b>
<b>Annual benefits: Transportation savings.....</b>	-----	-----	<b>58,000</b>

*Benefit-cost ratio.*—2.2.

*Local cooperation.*—Hold and save the United States free from damages due to the construction and maintenance of the improvement; and maintain depths in the berths adjacent to the Duquesne marine terminal and in the connecting waters, thence to the Federal project, comparable to those in the related Federal project area. Local interests have indicated willingness and ability to furnish requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Pennsylvania: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The proposed project would permit vessels in the over-sea traffic to take full advantage of the depth provided in the connecting channels and the St. Lawrence Seaway.

## BUFFALO HARBOR, N.Y.

(H. Doc. 451, 87th Cong.)

*Location.*—Buffalo Harbor is located at the eastern end of Lake Erie.

*Authority.*—Senate and House Public Works Committee resolutions adopted May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—Provides in general for an outer harbor, protected by breakwaters, with depths ranging from 23 to 28 feet with two entrance channels and an inner harbor consisting of Buffalo River and Buffalo Ship Canal with depths of 22 to 23 feet.

*Navigation problem.*—The existing project depths are not commensurate with depths being provided in the Great Lakes connecting channels and St. Lawrence Seaway.

*Recommended plan of improvement.*—Provides in general for deepening the outer harbor to 27 feet over a 500-foot width for a distance of 2,500 feet northward from the 28-foot project area with varying widths for a distance of 1,700 feet and continuing for 7,000 feet; eliminate from the existing project, the strip 25 feet wide between the presently authorized and the recommended easterly dredged limits; elimination of the easterly 50 feet of existing project extending from the proposed 27-foot depth area to the Buffalo River entrance channel; and that the uncompleted authorized work (estimated Federal cost \$313,500) be combined with the recommended work (estimated Federal cost \$2,796,500) at a total estimated cost of \$3,110,000.

*Estimated cost (price level of July 1961).*—

Federal.....	\$2, 796, 500
Non-Federal .....	300, 000
<b>Total.....</b>	<b>3, 096, 500</b>

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$102, 100	\$10, 900	\$113, 000
Maintenance and operation.....	18, 100	1, 500	19, 600
<b>Total.....</b>	<b>120, 200</b>	<b>12, 400</b>	<b>132, 600</b>
<b>Annual benefits: Transportation savings.....</b>			<b>211, 100</b>

*Benefit-cost ratio.*—1.6.

*Local cooperation.*—Provide without cost to the United States suitable areas for initial disposal of spoil, and necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvement; and, provide and maintain without cost to the United States depths in berthing areas commensurate with the depth provided in the related project area.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of New York: Favorable.

*Comments of the Bureau of the Budget.*—No objection.



*Remarks.*—Deepening of Buffalo Harbor, as proposed, is economically justified, and is necessary to permit loading of bulk and general cargo carriers to the full 25.5-foot draft permitted by the authorized connecting channels and available in the St. Lawrence Seaway.

#### GREAT SODUS BAY HARBOR, N.Y.

(H. Doc. 138, 87th Cong.)

*Location.*—Great Sodus Bay Harbor is in Great Sodus Bay on the south shore of Lake Ontario, about 31 miles east of Rochester, N.Y., and 29 miles west of Oswego, N.Y.

*Authority.*—Resolutions of the Committees on Public Works of the U.S. Senate and House of Representatives adopted May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—The existing Federal project, completed in 1940, provides for a channel 22 feet deep and 300 feet wide from the lake to the outer pierheads, thence 20 feet deep and 200 to 300 feet wide to deep water in the bay. The project includes two parallel entrance piers 450 feet apart, and two breakwaters inshore of the piers. The River and Harbor Act, approved August 30, 1935, required the Pennsylvania Railroad Co. to dredge and maintain a channel 20 feet deep and of suitable width from deep water in the bay to its coal-shipping dock, with a turning basin at the dock. The company presently maintains a channel 21 feet deep, 150 feet wide, and about one-half mile long, with a turning basin about 700 feet wide.

*Navigation problem.*—The principal navigation problem at Great Sodus Bay Harbor is lack of adequate depth to permit use of maximum draft by the large bulk cargo vessels engaged in carrying coal.

*Recommended plan of improvement.*—Provides for modification of the existing project for Great Sodus Bay Harbor, N.Y., to provide for a depth of 25 feet over a width of 300 feet in the approach channel from the lake to the piers; a depth of 24 feet over a width of 200 feet between piers; thence over a width of 450 feet to deep water bayward of the piers; and a channel 22 feet deep and 200 feet wide from deep water in the bay to the turning basin at the coal dock.

*Estimated cost (July 1959 price level).*—

Federal.....	\$765, 000
Non-Federal.....	314, 000
Total.....	1, 079, 000

#### *Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$29, 500	\$14, 700	\$44, 200
Increased maintenance.....	16, 300	0	16, 300
Total.....	45, 800	14, 700	60, 500
Annual benefits: Transportation savings.....			198, 000

#### *Benefit-cost ratio.*—3.2.

*Local cooperation.*—Provided that prior to construction, local interests agree to: (a) Hold and save the United States free from damages due to the construction and maintenance of the improvements;

(b) provide and maintain a turning basin at the coal dock, 22 feet deep and generally 800 feet wide; (c) provide and maintain a depth of 22 feet over a width of 75 feet in the berthing areas at the coal dock; and (d) provide adequate coal-handling facilities as needed to serve the prospective coal commerce. Local interests have indicated willingness and ability to provide requirements.

*Comments of the State and Federal agencies.*—

State of New York: Favorable.

Department of the Interior: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—Great Sodus Harbor is an important harbor for the shipment of bituminous coal in the Lake Ontario and St. Lawrence region. The proposed improvement is amply justified and is necessary to permit greater utilization of large modern bulk cargo vessels serving the port.

#### OSWEGO HARBOR, N.Y.

(H. Doc. 471, 87th Cong.)

*Location.*—Oswego Harbor, N.Y., is near the easterly end of the south shore of Lake Ontario at the mouth of the Oswego River.

*Authority.*—Similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representative on May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—The existing Federal project for Oswego Harbor generally provides for an outer harbor formed by a system of breakwaters comprising an outer west breakwater connected with the shore, a west arrowhead breakwater, an east arrowhead breakwater, and an outer east breakwater connected with the shore; a depth of 21 feet in soft material and 22 feet in hard material in the outer harbor between the arrowhead breakwaters, in the west outer harbor, and between the harbor lines in the Oswego River north of the north line of Seneca Street; a channel 250 feet wide in the east outer harbor and an irregularly shaped basin at the easterly end, with depths of 18 feet in soft material and 19 feet in hard material; maintenance of 145 feet of the west inner breakwater; and a detached breakwater 850 feet long at the harbor entrance and the removal of shoals to a depth of 25 feet below low-water datum in the approach to the entrance. Two project features have been designated as inactive—the east outer harbor and the triangular section along the harbor line east of the Oswego River.

*Navigation problem.*—Existing project depths are inadequate to accommodate vessels capable of utilizing the depths of the Great Lakes connecting channels and the St. Lawrence Seaway.

*Recommended plan of improvement.*—Provide for a depth of 27 feet in the lake approach channel from deep water in Lake Ontario to the entrance gap in the existing arrowhead breakwaters; a depth of 25 feet in a channel generally 800 feet wide through the outer harbor from the entrance gap terminating in a turning basin about 750 feet by 1,100 feet in size at the mouth of Oswego River with a depth of 25 feet; a depth of 24 feet in earth and 25 feet in hard material in a channel in Oswego River from the turning basin to the upstream end of the Port of Oswego Authority's east side terminal, a distance of about 1,600 feet, the limits of the channel to be parallel to and 50 feet channelward of the established U.S. harbor lines; relocation of the Federal project



limits in Oswego River between the upstream end of the Port of Oswego Authority's east side terminal and the upstream limit of the Federal project, at the north line of West Seneca Street, on lines parallel to and 50 feet channelward of the established U.S. harbor lines; elimination from the Federal project of maintenance of the west inner breakwater; and elimination from the Federal project of the modification authorized by the River and Harbor Act of June 30, 1948, consisting of the construction of an outer east breakwater 4,900 feet long, removal of about 1,020 feet of the shoreward end of the existing east breakwater, provision of a channel generally 250 feet wide with an irregularly shaped basin at its easterly end with depths of 18 feet in soft material and 19 feet in hard material.

*Estimated cost (price level of November 1961).*—Federal, \$1,780,000.

*Project economics.*—

Annual charges (Federal) :

Interest and amortization-----	\$44, 200
Maintenance dredging-----	4, 000
Maintenance of navigation aids-----	500

Total-----	48, 700
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Annual Benefits: Transportation savings-----	99, 800
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*Benefit-cost ratio.*—2.0.

*Local cooperation.*—Provide the necessary terminal and cargo handling facilities to accommodate vessels engaged in traffic in aluminum and general cargo; when and where necessary, dredge and maintain the areas between the Federal improvement and terminal facilities to adequate depths; and hold and save the United States free from claims for damages due to the construction and maintenance of the improvement. The Port of Oswego Authority has indicated its willingness to comply with the items of local cooperation.

*Comments of States and Federal agencies.*—

Department of the Interior: Favorable.

State of New York: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—Oswego Harbor is one of the principal harbors on the Great Lakes with waterborne commerce averaging over 2 million tons annually for the period 1950–60. Traffic in general cargo has materially increased since opening of the St. Lawrence Seaway. The proposed harbor improvement is amply justified.

#### DANA POINT HARBOR, CALIF.

(H. Doc. 532, 87th Cong.)

*Location.*—Dana Point, Calif., is on the coast in southern Orange County. It is about 40 miles southeast of Los Angeles-Long Beach Harbor and about 60 miles northwest of San Diego Harbor. The site of the considered harbor is in a sheltered cove in the lee of Dana Point, a precipitous promontory about 220 feet high.

*Authority.*—Public Law 14. 79th Congress, approved March 2, 1945.

*Existing project.*—There is no existing Federal project at Dana Point. Since 1956, local interests have provided a paved access road, about 2 acres of filled land protected from wave action by stone re-



vetment, a 300-foot-long concrete pile-trestled pier, and public facilities, at an estimated cost of \$350,000.

*Navigation problem.*—Local interests state that small craft harbor is needed in the area, not only for pleasure boating but also as a refuge for small craft during bad weather.

*Recommended plan of improvement.*—An entrance channel 500 feet wide, 2,000 feet long, and 20 to 15 feet deep; a main channel 400 feet wide, 3,250 feet long, and 15 to 10 feet deep; an east channel 250 feet wide, about 700 feet long, and 10 feet deep; an anchorage area 350 feet wide, about 600 feet long and 10 feet deep; a turning basin 450 feet wide, 500 feet long, and 10 feet deep; a west breakwater 5,400 feet long; and an east breakwater 2,340 feet long.

*Estimated cost (1961 price level).*—

Federal .....	<sup>1</sup> \$3, 730, 000
Non-Federal .....	<sup>2</sup> 3, 730, 000
Total .....	7, 460, 000

<sup>1</sup> Excludes \$30,000 for preauthorization studies and \$24,000 for aids to navigation.

<sup>2</sup> Cash contribution.

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization .....	\$138, 000	\$174, 000	\$312, 000
Maintenance and operation .....	60, 000		60, 000
Total .....	198, 000	174, 000	372, 000
<b>Annual benefits:</b>			
Recreational boating .....			856, 000
Sport fishing .....			4, 000
Total .....			860, 000

*Benefit-cost ratio.*—2.3.

*Local cooperation.*—Contribute in cash 50 percent of the first cost of construction of the general navigation facilities; provide all lands, easements, and rights-of-way necessary for construction and subsequent maintenance of the project and of aids to navigation; hold and save the United States free from damages; provide and maintain, adequate service frontage and public landing with suitable supply facilities, necessary mooring facilities and utilities, and access roads, parking areas, and other necessary public-use shore facilities; the first phase of development to be completed within 5 years, and full development within 15 years, after completion of the general navigation facilities; operate a general anchorage area and/or mooring facilities having reserved spaces adequate for accommodation of transient boat traffic and for refuge; secure and hold in the public interest all lands bordering the development to a width sufficient for proper functioning of the harbor. Orange County Board of Supervisors has indicated willingness to provide the necessary local cooperation.

*Comments of State and Federal agencies.*—

Department of the Interior: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.*—No objections.

*Remarks.*—The committee believes that the proposed improvement is needed to accommodate the growing boat population in Orange County and to provide a harbor of refuge for small craft during bad weather or other emergencies. Berthing facilities for 2,000 recreational boats of various sizes would be provided. The area tributary to Dana Point would more than sustain this number of boats. The items of local cooperation including the cash contribution are considered appropriate.

SANTA BARBARA HARBOR, CALIF.

(H. Doc. 518, 87th Cong.)

*Location.*—The harbor is on the coast of southern California about 90 miles northwest of Los Angeles.

*Authority.*—Resolutions by House Committee on Rivers and Harbors and House Public Works Committee March 19, 1946, and June 11, 1952, respectively.

*Existing project.*—Federal participation in existing project consists of \$30,000 annual contribution toward operation of sand intercepting plant. Local interests maintain an existing harbor comprising about 84 acres to depth varying from 0 to 21 feet, and a 1,500-foot-long entrance channel to at least 15 feet deep.

*Navigation problem.*—Present harbor inadequate and unsafe for operation of increasing number of boats.

*Recommended plan of improvement.*—Construction of 4,600 feet of additional breakwater; a 1,200- by 400-foot-wide entrance channel, 20 feet deep; a turning basin 1,000 feet by 500 feet, 20 feet deep; three channels totaling 2,600 feet in length and 15 feet deep; and an anchorage area.

*Estimated cost (July 1961 price level).*—

Federal.....	<sup>1</sup> \$3, 000, 000
Non-Federal.....	<sup>2</sup> 2, 900, 000
Total.....	5, 900, 000

<sup>1</sup> Excludes \$39,700 for preauthorization studies, and \$37,000 for aids to navigation.

<sup>2</sup> Includes \$2,890,000 cash contribution.

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$111, 000	\$135, 000	\$246, 000
Maintenance and operation.....	<sup>1</sup> 89, 000		89, 000
Navigation aids.....	1, 000		1, 000
Total.....	201, 000	135, 000	336, 000
Annual benefits:			
Recreational.....			838, 300
Commercial fishing.....			19, 000
Elimination of boat damage.....			5, 200
Total.....			862, 500

<sup>1</sup> In addition to \$30,000 under existing project.



*Benefit-cost ratio.*—2.6.

*Local cooperation.*—(a) Contribute in cash 49 percent of the first cost of the general navigation facilities, such contribution, presently estimated at \$2,890,000, to be paid in a lump sum prior to initiation of construction; (b) provide without cost to the United States all lands, easements, and rights-of-way; including suitable areas for initial and subsequent disposal of spoil and necessary retaining dikes, bulkheads and embankments therefor or the cost of such retaining works; (c) repair and seal the existing west breakwater in accordance with plans approved by the district engineer, and subsequent thereto transfer ownership of the breakwater to the United States; (d) remove a portion of the Stearn's Wharf and make such other alterations or relocations as may be required for the navigation improvements; (e) hold and save the United States free from damages; (f) provide and maintain without cost to the United States necessary mooring facilities and utilities, including a public landing with suitable supply facilities open to all on equal terms in accordance with plans approved by the Chief of Engineers, the first phase of development to be completed within 5 years after completion of the general navigation facilities and full development to be completed within 15 years; (g) provide or arrange for suitable marine repair facilities; (h) secure and hold in the public interest all lands bordering the development to a width sufficient for proper functioning of the harbor; (i) construct at their own expense the sand fillet east of the harbor concurrently with construction of the east breakwater to assure continued replenishment of beach sands to the downdrift beaches; and (j) bear any additional costs for replenishment of beach sand east of the harbor over the cost of maintenance dredging required for the general navigation features. Local interests have indicated willingness to furnish requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—Santa Barbara is the center of a highly developed recreation area. The present harbor is inadequate and unsafe for the rapidly increasing number of boats. Many local residents must now use distant moorages or land storage for their boats. The proposed improvement would encourage purchase of new boats and provide a harbor of refuge. It is needed and well justified by the anticipated benefits which are sufficiently local in nature to warrant the large cash contribution by local interests.

#### OAKLAND HARBOR, CALIFORNIA, FRUITVALE AVENUE BRIDGE

(S. Doc. 75, 87th Cong.)

*Location.*—Oakland Harbor is located on the east shore of San Francisco Bay opposite the Golden Gate passage to the Pacific Ocean. This report considers a highway and a railroad bridge at Fruitvale Avenue.

*Authority.*—Resolution of Public Works Committee, U.S. Senate, adopted May 12, 1950.

*Existing project.*—The existing Federal navigation project provides in general for a total channel length of 8½ miles from San Francisco



Bay to San Leandro Bay, varying in width from 800 feet to 275 feet and varying in depth from 35 feet to 25 feet. The project is complete except for deepening the tidal canal above the Park Street Bridge to 25 feet.

*Problem.*— To determine whether the Federal Government should replace the present federally owned 2-lane Fruitvale highway bridge with a modern bridge adequate for the authorized 25-foot navigation project in the tidal canal.

*Recommended plan of improvement.*—Modification of the existing project for Oakland Harbor, Calif., to provide for Federal participation in the reconstruction of the highway bridge across the tidal canal at Fruitvale Avenue to the extent of providing a 2-lane, movable bridge adequate for the authorized 25-foot navigation project.

*Estimated cost (price level of June 1959).*—

Federal.....	\$1, 750, 000
Non-Federal.....	695, 000
Total.....	2, 445, 000

*Justification.*—It is considered that the Federal Government should share in the cost of replacing the highway bridge in recognition of the fact that the United States will be required to replace the existing bridge in the near future or continue to spend exceedingly high amounts for maintenance. The recommendations are considered to be equitable under present Federal policy in regard to replacement of bridges over navigable waterways, and proposed improvements of existing waterways.

*Local cooperation.*—Provided local interests: (a) Construct the approaches; (b) make the necessary utility changes; and (c) upon completion of construction, take over the railroad and highway bridges and their approaches for operation, maintenance, and subsequent replacement in accordance with regulations satisfactory to the Secretary of the Army. Local interests are unwilling to cooperate on this basis.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

State of California: The department of water resources indicates that the State of California is not involved in the financing of the proposed project since no flood control is involved. The district attorney of Alameda County, however, feels, that the recommendations of the Chief of Engineers impose undue burdens on the local people. The county questions the equity of the requirements that local interests make the necessary utility changes and take over the railroad and highway bridges for operation, maintenance, and subsequent replacement.

*Comments of the Bureau of the Budget.*—Although the Bureau of the Budget notes that local interests are unwilling to cooperate on the basis recommended by the Acting Chief of Engineers, it concurs in his view that local interests should have the opportunity to resolve the problem of the Fruitvale Avenue Bridge at such time as they are willing to meet the requirements of local cooperation. The Bureau of the Budget states that there would be no objection to the submission of this report to the Congress.

*Remarks.*—The committee considers the proposal of the Chief of Engineers for resolution of the problem of reconstruction of the Fruitvale Avenue Bridge to be fair and equitable. Although local interests are presently unwilling to cooperate on this basis, the committee concurs in the view that they should have the opportunity to do so at such time as they are willing to meet the requirements of local cooperation.

## OAKLAND HARBOR, CALIF.

(H. Doc. 353, 87th Cong.)

*Location.*—Oakland Harbor is on the eastern side of San Francisco Bay, about 9 miles from the Golden Gate.

*Authority.*—House Public Works Committee resolution adopted March 30, 1955.

*Existing project.*—The existing Federal project for Oakland Harbor provides for a channel 35 feet deep and 600 to 950 feet wide from deep water in San Francisco Bay to the Army base in the outer harbor, including a turning basin; a channel 30 feet deep and 275 to 800 feet wide through the inner harbor and Brooklyn Basin to Park Street on the tidal canal, thence 25 feet deep and 275 feet wide to San Leandro Bay, plus certain widened areas and a turning basin 30 feet deep a channel 25 feet deep and 300 feet wide at the north end of Brooklyn Basin; parallel jetties at the inner harbor entrance. The project is complete except for deepening the tidal canal above Park Street from 18 to 25 feet.

*Problem.*—Under existing conditions vessels with drafts of 28 to 34 feet cannot operate in the inner harbor at all tidal stages.

*Recommended plan of improvement.*—Modification of the existing project to provide for a depth of 35 feet in the existing inner harbor channels and tidal canal to Park Street, including the triangular area and turning basin in the Brooklyn Basin, and the widened areas except that, in front of the Grove and Market Street piers, the 35-foot depth would extend only to within 75 feet of the pierhead line; and a depth of 35 feet in the north channel of Brooklyn Basin for a distance of 1,300 feet.

*Estimated cost (price level of July 1961<sup>1</sup>).—*

Federal .....	\$6, 775, 000
Non-Federal .....	1, 200, 000
<b>Total .....</b>	<b>7, 975, 000</b>

<sup>1</sup> See remarks.

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization .....	\$207, 700	\$54, 700	\$262, 400
Maintenance .....	28, 000	18, 000	46, 000
<b>Total .....</b>	<b>235, 700</b>	<b>72, 700</b>	<b>308, 400</b>
<b>Annual benefits: Savings in vessel operating costs .....</b>			<b>560, 000</b>



*Benefit-cost ratio.*—1.8.

*Local cooperation.*—Provide, without cost to the United States, all lands, easements, and rights-of-way necessary for construction and maintenance of the improvement; hold and save the United States free from damages to wharves, piers, tubes, and other marine and submarine structures due to initial dredging and subsequent maintenance; accomplish, without expense to the United States, alterations as may be required in sewer, water supply, drainage, and other utility facilities; provide and maintain, at local expense, adequate public terminal and transfer facilities, open to all on equal terms; and deepen and maintain slips and berths when and as required; and provided further that, if it is determined in detailed studies that spoil disposal areas are needed, local interests agree to furnish, upon request of the Chief of Engineers, and without cost to the United States, the required spoil-disposal areas including necessary dikes, bulkheads, and embankments for the initial dredging and subsequent maintenance. Local interests have indicated willingness to furnish requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

NOTE.—At the time the Oakland Harbor report was being prepared it was considered desirable to dispose of dredge spoil in deep water in San Francisco Bay just west of Yerba Buena Island. However, studies being made at the time have been completed and reveal the undesirability of using San Francisco Bay and tributary waters as disposal areas for dredge spoils. Accordingly, local interests will be required to provide on-shore disposal areas. The current cost estimates are based on July 1961 prices, use of pipeline dredge, and on-shore disposal of spoil, and are in lieu of the previous Federal and local costs of \$4,716,000 and \$224,000, respectively, based on November 1958 prices.

*Remarks.*—Oakland Inner Harbor has a highly developed waterfront which now handles a large amount of waterborne commerce with prospects of a considerable increase in the future. Existing depths are inadequate and hazardous for modern deep-water general-cargo vessels. The proposed improvement will eliminate vessel delays due to tidal conditions which will result in savings of vessel operating costs more than sufficient to offset the cost of improvement.

#### NOYO RIVER AND HARBOR, CALIF.

(S. Doc. 121, 87th Cong.)

*Location.*—Noyo River flows into the Pacific Ocean about 140 miles north of San Francisco, Calif. The cove at the mouth of the river forms Noyo Harbor with depths ranging up to 50 feet.

*Authority.*—Resolution of the Committee on Public Works of the U.S. Senate adopted September 7, 1961.

*Existing project.*—An existing Federal project provides for a south breakwater 1,100 feet long at the harbor entrance, two jetties at the entrance to Noyo River, a 10-foot deep channel, 100 and 150 feet wide and 0.7 mile long and a mooring basin 10 feet deep at the upper end



of the channel. The breakwater, upper 400 feet of channel and the mooring basin have not been constructed.

*Navigation problem.*—Local interests desire additional breakwaters to reduce wave action in the harbor, and a 30-foot channel, anchorage and turning basin to permit commercial shipping of lumber and petroleum products.

*Recommended plan of improvement.*—Construction of a breakwater 500 feet long at the north entrance to the harbor in addition to the authorized 1,100-foot breakwater. This would provide a protected harbor with adequate depth to allow use by oceangoing lumber barges and deep-draft vessels.

*Estimated cost (1962 price level).*—

Federal.....	\$13,231,000
Non-Federal.....	<sup>1</sup> 337,000
<b>Total.....</b>	<b><sup>2</sup> 13,568,000</b>

<sup>1</sup> Includes \$325,000 cash contribution.

<sup>2</sup> Includes cost of both recommended and authorized breakwaters.

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$396,000	\$15,000	\$411,000
Maintenance and operation.....	133,000		133,000
Maintenance of navigation aids.....	3,000		3,000
<b>Total.....</b>	<b>532,000</b>	<b>15,000</b>	<b>547,000</b>
<b>Annual benefits:</b>			
Transportation savings.....			357,000
Commercial fishing.....			78,000
Recreational fishing and boating.....			35,000
Area redevelopment benefits.....			113,000
<b>Total.....</b>			<b>583,000</b>

*Benefit-cost ratio.*—1.1.

*Local cooperation.*—Contribute, in cash, 2.4 percent of construction cost; provide all lands, easements, and rights-of-way; hold and save the United States free from damages; and provide adequate terminal and transfer facilities; such facilities to be constructed prior to or concurrently with the breakwaters. Local interests are interested in cooperating in the improvements.

*Comments of the State and Federal agencies*—

Department of the Interior: Favorable.

Department of Commerce: Favorable. The Area Redevelopment Administration advises that this project is extremely important to the overall economic development of Mendocino County. Construction of the project would lead to substantial employment in the lumber, fishing, and fish-processing industries. Substantial unemployment now existing in Mendocino County adds an urgency to the need for the project.

State of California: Favorable.

*Comments of the Bureau of the Budget.*—Subject to consideration of the following comments there would be no objection to submission of the report. The Bureau would expect that if the project is authorized, the corps would, prior to any request for appropriation, reevaluate the economic justification based upon the appropriate interest

rate at that time and reflecting further consideration to the appropriate economic life of its various facilities.

*Remarks.*—The committee notes that the proposed improvement is very important to the overall economic development of the area tributary to Noyo Harbor. Large timber resources are located in this area. Harbor improvement will permit participation in the general increase in the Pacific coast lumber transport trade. It should also lead to substantial employment in the fishing and fish processing industries. Construction of this project is considered to be a worthwhile investment of public funds.

COLUMBIA AND LOWER WILLAMETTE RIVERS, OREG. AND WASH.

(H. Doc. 203, 87th Cong.)

*Location.*—The Columbia River rises in British Columbia, enters the United States in northeastern Washington, flows southerly to its confluence with the Snake River, thence westerly along the Oregon-Washington boundary to the Pacific Ocean. The reach of the Columbia River under consideration in this report extends from the mouth of the Willamette River upstream 4.5 miles to Vancouver, Wash., 106 river miles from the sea.

*Authority.*—Resolutions by the Senate and House Public Works Committees adopted March 14, 1957, and April 9, 1957, respectively.

*Existing project.*—Provides for a channel 35 feet deep and 500 feet wide from the mouth of Columbia River to Portland, Oreg. a distance of 113 miles; and a channel 30 feet deep and 300 feet wide from the mouth of Willamette River to Vancouver, Wash., a distance of 5 miles, with two turning basins 30 feet deep and 800 feet wide, and approximately 2,000 and 3,000 feet long for the upper and lower basins, respectively. The project has been completed.

*Navigation problem.*—Inadequate channel depth and width for vessels now using the waterway between the mouth of Willamette River and Vancouver. Groundings and damage to ships have been prevented by light loading and, during low river stages, running the tides.

*Recommended plan of improvement.*—Provides for a channel in the Columbia River 35 feet deep and 500 feet wide from the mouth of the Willamette River to the Interstate Bridge at Vancouver, Wash., with two turning basins 35 feet deep, 800 feet wide, and 2,000 and 5,000 feet long for the upper and lower basins, respectively.

*Estimated cost (fourth quarter price level of 1959).*—

Federal	\$492, 500
Non-Federal	17, 900
<b>Total</b>	<b>510, 400</b>

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$17,660	\$840	\$18,500
Maintenance.....	48,000	0	48,000
<b>Total</b> .....	65,660	840	66,500
<b>Annual benefits:</b>			
Transportation savings.....			159,770
Land enhancement.....			12,000
<b>Total</b> .....			171,770

*Benefit-cost ratio.*—2.6.

*Local cooperation.*—Contribute in cash 3.5 percent of the construction cost, presently estimated at \$17,900 in a lump sum prior to construction; provide all lands, easements, and rights-of-way including spoil disposal areas; provide and maintain depths in berthing areas and local access channels commensurate with project depths; hold and save the United States free from damages; provide and maintain public terminal facilities open to all on equal terms. Local interests have indicated willingness to meet requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Washington: Favorable.

State of Oregon: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—Lack of depth in the presently authorized channel requires partial loading of the larger ships and causes delays to many ships in waiting for a high tide to navigate the channel. The proposed improvement will minimize delays, permit full loading of ships, and reduce present hazards to vessels. The committee considers the project to be well justified and the local contribution to be appropriate in view of the enhanced land values resulting from deposition of spoil.

## COLUMBIA AND LOWER WILLAMETTE RIVERS BELOW VANCOUVER, WASH., AND PORTLAND, OREG.

(H. Doc. 452, 87th Cong.)

*Location.*—The Columbia River rises in British Columbia, enters the United States in northeastern Washington, flows southerly to its confluence with the Snake River, thence westerly along the Oregon-Washington boundary to the Pacific Ocean.

*Authority.*—Resolutions by the Committee on Public Works of the U.S. Senate and House of Representatives adopted March 14, 1957, and April 9, 1957, respectively.

*Existing project.*—The existing project for the Columbia and lower Willamette Rivers provides for a channel 35 feet deep and 500 feet wide in the Columbia River from about river mile 3 to the mouth of Willamette River, mile 101.5, thence 30 feet deep and 300 feet wide to Vancouver, river mile 106.5; upper and lower turning basins at Vancouver; a channel in the Willamette River 35 feet deep from the mouth to Portland, a distance of about 11.6 miles; numerous side channels and



connecting waterways; a small-boat mooring basin at Astoria; and construction of stone and pile dikes and revetments. Local interests have provided channel improvements and maintenance in addition to port facilities. Several power and navigation dams upstream from Vancouver have been built by the Federal Government. Others, either under construction or authorized, will provide slackwater navigation on the Columbia River to Pasco-Kennewick, Wash., river mile 329, and on the Snake River to Lewiston, Idaho, river mile 140.

*Navigation problem.*—With the present trend to use of larger ships, increased operating costs will be incurred through delays, light loading, and possible ship damage. The existing project dimensions restrict the use of larger ships and eventually will limit the commerce carried by the waterway.

*Recommended plan of improvement.*—(a) A channel 40 feet deep and 600 feet wide from Vancouver, Wash., river mile 105.5, to the mouth of Columbia River, river mile 3; (b) a turning basin at Vancouver, Wash., 40 feet deep, 800 feet wide, and about 5,000 feet long; (c) a turning basin at Longview, Wash., 40 feet deep, average width of 1,200 feet, and about 6,000 feet long; and (d) a channel 40 feet deep in Willamette River with varying widths of 600 to 1,900 feet, from the mouth, river mile 0, to Broadway Bridge, river mile 11.6, which encompasses the Portland Harbor area; with the provision that accomplishments of that portion of the plan contained in items (a) and (b) be contingent upon accomplishment of improvements in these areas recommended in interim report on Columbia River dated March 31, 1961.

*Estimated cost (1961 price level).*—

Federal.....	\$20, 100, 000
Non-Federal.....	<sup>1</sup> 419, 000
Total.....	20, 519, 000

<sup>1</sup> Cash contribution.

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$733, 000	\$23, 000	\$756, 000
Maintenance and operation.....	775, 000		775, 000
Total.....	1, 508, 000	23, 000	1, 531, 000
Annual benefits:			
Elimination of delays.....			2, 322, 000
Elimination of groundings.....			7, 800
Delays in entrance.....			—99, 400
Land enhancement.....			84, 800
Total.....			2, 314, 200

*Benefit-cost ratio.*—1.5.

*Local cooperation.*—Provide all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of aids to navigation; hold and save the United States free from damages; provide and maintain at local expense adequate public terminal and transfer facilities; accomplish such alterations as are required in utility facilities; assist in the work of improving and maintaining

the main ship channel in Columbia and Willamette Rivers; provide and maintain depths in berthing areas and local access channels serving the terminals commensurate with the depths provided in the related project areas; and contribute in cash 1.8 percent of the cost of construction by the Corps of Engineers. Local interests have indicated willingness to provide required cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

State of Washington: Favorable.

State of Oregon: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.—*The committee recognizes that, with the present channels and the trend to use of larger ships, increased operating costs will be incurred through delays, light loading, and possible ship damage. Also, that the existing dimensions will restrict the use of larger ships and eventually limit the commerce carried by the waterway. Improvement is desirable. In view of the land enhancement from use of spoil to fill low areas to a flood-free level, the proposed local contribution is considered appropriate.

TACOMA HARBOR, PORT INDUSTRIAL AND HYLEBOS WATERWAYS, WASH.

(S. Doc. 104, 87th Cong.)

*Location.—*Tacoma Harbor is in west-central Washington at the head of Commencement Bay, a southeasterly arm of Puget Sound, and is about 26 nautical miles south of Seattle.

*Authority.—*Resolution of the Committee on Public Works of the U.S. Senate adopted May 27, 1955.

*Existing project.—*City, Port Industrial, and Hylebos Waterways, as well as two training walls at the mouth of Puyallup Waterway, are the features of the existing Federal project for Tacoma Harbor. City Waterway has a depth of 29 feet in the outer portion and depths of 22 and 19 feet in the inner portion, and Port Industrial and Hylebos Waterways are 30 feet deep.

*Navigation problem.—*Development of lands, navigation channels, and related facilities are needed for the continued growth and development of water-oriented industry in the Tacoma Harbor area. There is an urgent need for waterfront industrial sites in the Puget Sound area.

*Recommended plan of improvement.—*Improvement of Port Industrial Waterway by extending it about 3,900 feet at a width of 300 feet, and providing a turning basin beyond the inner end 1,200 feet wide, all at a depth of 35 feet below mean lower low water; reducing the width of the existing channel to 600 feet and deepening to 35 feet between Lincoln Avenue and East 11th Street; and reducing the width of the existing channel to 650 feet and deepening to 35 feet over a width of 300 feet from East 11th Street to the bay; and Hylebos Waterway by extending it about 2,000 feet at a width of 200 feet, and providing a turning basin beyond the inner end 770 feet wide; increasing the width of the existing channel to 200 feet; reducing the authorized width of the existing turning basin to 510 feet inclusive



of the width of the existing channel; all at the existing project depth of 30 feet below mean lower low water.

*Estimated cost (1961 price level).—*

Federal.....	\$2, 460, 000
Non-Federal.....	<sup>1</sup> 2, 159, 000
Total.....	4, 619, 000

<sup>1</sup> Includes \$921,000 cash contribution.

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$91, 000	\$133, 000	\$224, 000
Maintenance and operation.....	8, 000	5, 000	13, 000
Total.....	99, 000	138, 000	237, 000
Annual benefits:			
Transportation savings.....			164, 400
Land enhancement.....			185, 000
Total.....			349, 400

*Benefit-cost ratio.—*1.5. (Port Industrial Waterway has a benefit-cost ratio of 1.3; Hylebos Waterway a ratio of 2.3.)

*Local cooperation.—*Provide all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project; hold and save the United States free from damages; provide and maintain adequate public terminal and transfer facilities; provide and maintain depths in berthing areas commensurate with the channel depths; accomplish alteration of utilities as required; restrict the sale of waterfront sites along channels to firms requiring water transportation; and contribute in cash or equivalent work 29.5 and 19.5 percent, respectively, of the first cost of construction for the Port Industrial and Hylebos Waterways improvements, presently estimated at a total of \$921,000. Port of Tacoma officials have indicated a willingness to provide the necessary local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Commerce: Favorable.

State of Washington: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.—*The committee notes that the proposed improvement of these waterways is necessary to serve future industries expected to locate in this area. It is believed that the resulting benefits from the development warrant the cost of improvement. The committee concurs in the proposed items of local cooperation including the cash contribution due to land enhancement resulting from deposition of spoil.

KINGSTON HARBOR, WASH.

(H. Doc. 417, 87th Cong.)

*Location.—*On the west side of Puget Sound about 9 miles northwest of Seattle, Wash.

*Authority.—*House Public Works Committee resolution adopted March 30, 1955.



*Existing project.*—There is no Federal project for navigation at Kingston Harbor. In 1953 the Port Commission of Kingston completed a ferry terminal which involved dredging an adjacent area of about 4 acres to a depth of 10 feet to obtain fill material. This area, together with a locally constructed wharf and float, provides temporary accommodations for transient small craft.

*Navigation problem.*—Small craft are subject to damage from easterly storms and additional anchorage area for refuge is needed for recreational and fishing craft.

*Recommended plan of improvement.*—Construction of a breakwater, 1,040 feet long and dredging an entrance channel 12 feet deep and 80 to 120 feet wide from deep water around the southerly end of the breakwater to the locally dredged boat basin.

*Estimated cost (March 1961 price level).*—

Federal.....	\$428, 000
Non-Federal.....	<sup>1</sup> 195, 000
<b>Total.....</b>	<b>623, 000</b>

<sup>1</sup> Includes cash contribution of \$193,000.

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$16, 600	\$11, 500	\$28, 100
Maintenance.....	5, 000		5, 000
Navigation aids.....	300		300
<b>Total.....</b>	<b>21, 900</b>	<b>11, 500</b>	<b>33, 400</b>
<b>Annual benefits:</b>			
Recreational boating.....			26, 600
Commercial fishing.....			15, 800
<b>Total.....</b>			<b>42, 400</b>

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Contribute in cash 31 percent of construction cost of the breakwater and channel, such contribution presently estimated at \$193,000, in a lump sum prior to construction; provide all lands, easements, and rights-of-way, including spoil disposal areas; hold and save the United States free from damages; provide and maintain adequate public landing facilities, open to all on equal terms; provide access roads and parking areas; make necessary utility relocations. Local interests have indicated willingness to furnish requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Washington: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The location of Kingston in relation to favored cruising areas, its proximity to commercial fishing banks, and its accessibility by highway and ferry routes, make it a desirable site for a boat moorage. It appears also to be needed for a harbor of refuge. The committee concurs in the proposed improvement and the specified items of local cooperation.

## SWINOMISH CHANNEL, WASH.

(H. Doc. 499, 87th Cong.)

*Location.*—Swinomish Channel (formerly Swinomish Slough) is a narrow tidal channel connecting Padilla Bay and Saratoga Passage, and separating Fidalgo Island from the mainland of northwestern Washington. It affords an inside passage between Puget Sound ports on the south and Billingham and other ports on the north.

*Authority.*—Resolutions by the Committees on Public Works of the U.S. Senate and House of Representatives adopted May 18, 1957, and February 20, 1951, respectively.

*Existing project.*—The existing Federal project provides for a channel 100 feet wide and 12 feet deep from Saratoga Passage to Padilla Bay, a distance of 11 miles. Local interests have provided terminal facilities and berthing areas.

*Navigation problem.*—The existing channel is considered unsafe due to lack of 16 feet depth, crooked alinement, and reefs. Bank erosion is threatening dikes protecting valuable farmlands. A small boat harbor is needed for moorage for recreational and other craft and as a harbor of refuge.

*Recommended plan of improvement.*—Improve the passage through the "hole in the wall" by removing a depth of 12 feet the submerged points projecting from Fidalgo and McGlinn Islands, and removing part of McGlinn Island to an elevation of 12 feet above mean lower low water to improve sight distance.

*Estimated cost (1961 price level).*—

Federal.....	\$887, 000
Non-Federal.....	1, 000
Total.....	888, 000

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$32, 900	(1)	\$32, 900
Maintenance and operation.....			
Total.....	32, 900		32, 900
<b>Annual benefits:</b>			
Saving in operational cost of tugs.....			16, 100
Reduction in vessel and raft damage.....			7, 400
Reduction in waiting time.....			10, 700
Savings by increased traffic.....			9, 600
Total.....			\$43, 800

<sup>1</sup> Negligible.

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Provide all lands, easements and rights-of-way and suitable spoil areas. Local residents are formulating plans for organizing a port district. Informal assurances has been given that local interests will cooperate in the planned improvements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Washington: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee concurs in the proposed improvement which is needed and justified for removal of navigation hazards in this channel.

## KAUNAKAKAI HARBOR, MOLOKAI, HAWAII

(H. Doc. 484, 87th Cong.)

*Location.*—On the south-central coast of the island of Molokai, about 60 miles from Honolulu Harbor on the island of Oahu.

*Authority.*—House Public Works Committee resolution adopted April 9, 1957.

*Existing project.*—Completed in 1934, provides an entrance channel 530 feet wide, and a basin 1,500 feet long, 600 feet wide, and 23 feet deep at mean low water.

*Navigation problem.*—Molokai is the only large Hawaiian island without a deepwater harbor for transpacific shipping. Commerce consists principally of pineapples grown on the island and shipped by barge to Honolulu for processing. Savings could be effected by processing pineapples on Molokai for direct shipment by deep-draft vessels to the mainland. Also, additional harbor area is needed for commercial fishing and recreational boating.

*Recommended plan of improvement.*—Provides for: (a) A new entrance channel 500 feet wide and 40 feet deep; (b) a deepwater harbor of about 62 acres, 35 feet deep; (c) a harbor basin for light-draft vessels of about 10 acres, 15 feet deep; (d) a south breakwater 2,300 feet long; and (e) a west breakwater and stream jetty 4,000 feet long.

*Estimated cost (price level of May 1961).*—

Federal.....	\$7, 919, 000
Non-Federal.....	702, 000
Total.....	8, 621, 000

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$290, 000	\$33, 000	\$323, 000
Maintenance and operation.....	24, 000	4, 000	28, 000
Total.....	314, 000	37, 000	351, 000
<b>Annual benefits:</b>			
Transportation savings.....			1, 453, 000
Land fill.....			19, 400
Damages prevented.....			28, 000
Recreational boating.....			24, 400
Commercial fishing.....			4, 400
Total.....			\$1, 529, 200

*Benefit-cost ratio.*—4.4.

*Local cooperation.*—Construction be contingent upon the prior or concurrent establishment and operation on Molokai by local interests of industrial facilities related to transpacific commerce, and local interests agree to: (a) contribute in cash 0.5 percent of the first cost of the general navigation facilities for the deepwater harbor, and 42.5 percent of the first cost of the general navigation facilities for the



light-draft harbor, such contributions, presently estimated at \$202,000; (b) provide all lands, easements, and rights-of-way, including royalty-free borrow and quarry materials, and suitable areas for disposal of spoil and necessary retaining dikes, bulkheads, and embankments; (c) hold and save the United States free from damage which might result from construction and maintenance of the project; (d) accomplish all alterations of roads and utilities; (e) provide and maintain berthing areas, public terminal and transfer facilities for the deep-water basin, and adequate mooring facilities; and a public landing in the light-draft harbor open to all on equal terms; and (f) an adequate refrigeration and storage facility at the light-draft harbor in support of commercial fishing operations. Local interests have given informal assurances that the requirements of local cooperation will be met.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Hawaii: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee notes that Molokai is the only large Hawaiian island without a deepwater harbor and that the economy of the island would be improved if an adequate port were provided. The committee also notes the need for a harbor for light-draft vessels to accommodate the fishing fleet and other small craft. The proposed improvement shows a very favorable benefit-cost ratio. The committee concurs in the recommendation and the items of local cooperation, including the cash contribution due to the special local benefits which will result.

#### STATE OF NEW HAMPSHIRE BEACH-EROSION CONTROL

(H. Doc. 416, 87th Cong.)

*Location.*—Area includes about 18 miles of shore frontage comprising the entire Atlantic Ocean shore of the State of New Hampshire. It includes the towns of New Castle, Rye, North Hampton, Hampton, and Seabrook.

*Report authorized by.*—Section 2 of River and Harbor Act approved July 3, 1930 (cooperative study provisions).

*Existing projects.*—A Federal project authorized September 3, 1954 (HD 325/83/2), provided for Federal participation in widening about 5,200 feet of beach at Hampton Beach. The work was completed in 1955 at a cost of \$374,234.59, and the State subsequently reimbursed \$124,744.86 as the Federal share thereof.

*Beach-erosion control problem.*—Gradual erosion from storm wave attack and reduction in natural supply of beach materials has reduced beach width fronting developed areas to such extent that these areas are exposed to wave damage during storms and beach areas are inadequate for recreational use. The existing beach restoration project at Hampton Beach includes periodic replenishment of beach fill as a project feature to be accomplished by local interests, and a groin is needed to maintain the project beach width along the northern portion of that beach. The passage of Public Law 826, 84th Congress, approved July 28, 1956, permits Federal participation in periodic nourishment of beaches. Review of the existing Hampton Beach

project to determine need for modification, nourishment requirements, and eligibility for Federal participation toward their cost was also deferred.

*Recommended plans of improvement.*—Provide for (a) at North Hampton Beach—widening 1,600 feet of beach to 150-foot width by direct placement of sand fill and construction of a 460-foot groin; (b) at Wallis Sands Beach—widening 800 feet of beach to 150-foot width by direct placement of sand fill and construction of a 350-foot groin; and (c) at Hampton Beach—modification of the existing project to authorize construction of a 235-foot groin and Federal contribution of one-third toward the costs of periodic nourishment of the beach for an initial period of 10 years from the year of the first nourishment operation.

*Estimated costs (June 1960 price level).*—

	Federal	Non-Federal	Total
North Hampton Beach.....	\$41,000	\$129,000	\$170,000
Wallis Sands Beach.....	41,000	82,000	123,000
Hampton Beach (new work—groin).....	6,000	12,000	18,000
Total.....	88,000	223,000	311,000

The estimated cost of periodic nourishment at Hampton Beach, a responsibility of local interests under the existing project, is \$50,000 annually. The recommended modification of the project provides for Federal participation in this cost as follows:

	Per year for 1st 10 years	Per year thereafter
Federal.....	\$16,700	0
Non-Federal.....	33,300	\$50,000
Total.....	50,000	50,000

*Project economics.*—Overall project at Hampton Beach includes initial construction completed in 1955 at a total cost of \$374,235 and recommended new work.

**Annual charges:**

North Hampton Beach.....	\$12,700
Wallis Sands Beach.....	8,200
Hampton Beach (new work).....	1,100
Total (new work).....	22,000
Hampton Beach (overall).....	<sup>1</sup> 66,390

**Annual benefits:**

North Hampton Beach.....	16,950
Wallis Sands Beach.....	18,000
Hampton Beach (new work).....	6,000
Total (new work).....	40,950
Hampton Beach (overall).....	140,190

**Benefit-cost ratio:**

North Hampton Beach.....	1.3
Wallis Sands Beach.....	2.2
Hampton Beach (new work).....	5.4
Hampton Beach (overall project).....	2.1

<sup>1</sup> Includes Federal share of periodic nourishment costs estimated at \$16,700 per year for 1st 10-year period.



*Local cooperation.*—Obtain approval of the Chief of Engineers for plans and specifications and arrangements for prosecuting the work prior to its commencement; provide suitable appurtenant facilities at North Hampton Beach to the extent necessary for realization of evaluated benefits; and furnish satisfactory assurances that local interests will maintain the protective measures and provide periodic nourishment during their economic life, but in the case of Hampton Beach, with Federal assistance as recommended; control water pollution to the extent necessary to safeguard the health of bathers; and maintain continued public ownership of the shores upon which the Federal participation is based, and their administration for public use.

*Comments of State and Federal agencies.*—

State of New Hampshire: Favorable.

Department of the Interior: Favorable.

*Comments of Bureau of Budget.*—No objection.

*Remarks.*—Restoration and stabilization of the beach at three locations along the shores of New Hampshire is necessary for the protection of public property, and to restore needed recreational beach widths which have been reduced by erosion from storm waves and insufficient supply of natural beach material. The committee notes the provision of the project including periodic nourishment is urgently needed and is amply justified.

#### CLARK POINT, NEW BEDFORD, MASS., BEACH EROSION CONTROL

(H. Doc. 584, 87th Cong.)

*Location.*—In Bristol County, about 50 miles south of Boston, on a peninsula projecting into Buzzards Bay, an arm of the Atlantic Ocean immediately southwest of Cape Cod.

*Report authorized by.*—Section 2 of River and Harbor Act approved July 3, 1930 (cooperative study provisions).

*Existing project.*—No existing Federal beach erosion control project.

*Beach erosion control problems.*—Erosion of the beaches has resulted in limited recreational beach area and damage to structures protecting existing facilities and Rodney French Boulevard. Protective measures provided by local interests have been inadequate.

*Recommended plan of improvement.*—Restore 1,600 feet of publicly owned beach fronting Rodney French Boulevard (west) to a minimum width of 100 feet by direct placement of suitable sandfill, raise the inshore end of one existing groin and extend the outer ends of two other existing groins.

*Estimated costs (May 1961 price level).*—

Federal	-----	\$60, 000
Non-Federal	-----	120, 000
Total	-----	180, 000



*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$2,240	\$5,200	\$7,440
Maintenance (groins).....	0	660	660
Nourishment.....	0	12,100	12,100
Total.....	2,240	17,960	20,200
Annual benefits:			
Elimination of maintenance to existing protection.....			12,600
Recreation.....			26,325
Total.....			38,925

*Benefit-cost ratio.—1.9.*

*Local cooperation.*—Obtain approval of Chief of Engineers for plans and specifications and arrangements for prosecuting the work prior to its commencement; and furnish satisfactory assurances that local interests will: maintain the protective measures during their economic life, control water pollution to the extent necessary to safeguard the health of bathers, and maintain continued public ownership of the shore upon which Federal participation is based and its administration for public use.

*Comments of State and Federal agencies.—*

City of New Bedford: Favorable.

Commonwealth of Massachusetts: Favorable.

Department of the Interior: Favorable.

*Comments of Bureau of Budget.*—No objection. However, the Bureau of the Budget notes that the mayor of New Bedford states that the city is not in a position to meet the financial requirements of local participation at this time and that there is no indication in the letter as to when the city would be able to meet these requirements. Under these circumstances, therefore, the Bureau believes that authorization of this project would be premature.

*Remarks.*—The recommended improvement consisting of restoring 1,600 feet of publicly owned beach is located along a highly developed residential and recreational area where beaches have gradually deteriorated. The committee notes that wider beaches are needed for protection of shore and shore front properties and for recreational use, and that the improvement is amply justified.

## VIRGINIA BEACH, VA., BEACH EROSION CONTROL

(H. Doc. 382, 87th Cong.)

*Location.*—On the Atlantic Ocean shore about 3.5 miles south of the entrance to Chesapeake Bay and 19 miles east of Norfolk.

*Report authorized by.*—Section 2 of River and Harbor Act approved July 3, 1930 (cooperative study provisions).

*Existing project.*—Authorized by River and Harbor Act of 1954 (H. Doc. 186, 83d Cong., 1st sess.), provided for initial widening of the beach to 100-foot width at elevation 7 feet above minimum low water and deferred construction of a system of 21 groins to be built if experience demonstrates their need. Initial beach widening completed in 1953.

*Beach erosion control problem.*—Virginia Beach is the largest and most popular resort center in Virginia and is extensively developed for tourist trade. The existing project includes periodic replenishment of beach fill as a project feature to be accomplished by local interests. The passage of Public Law 826, 84th Congress, approved July 28, 1956, permits Federal participation in periodic nourishment of beaches. Review of the existing project to determine nourishment requirements and eligibility for Federal participation toward its cost was desired.

*Recommendation.*—Modification of the existing project to authorize Federal contribution of one-third of the costs of periodic nourishment of the shore for a period of 25 years from the date of commencement of operations in placing an initial quantity of nourishment material equal to the deficiency in the design beach at that time.

*Estimated costs (January 1961 price levels).*—The estimated costs of periodic nourishment, a responsibility of local interests under the existing project, are \$150,000 to provide initial quantity of nourishment to make up existing deficiency in design beach plus \$54,000 annually for normal nourishment. The recommended modification of the project provides for Federal participation in this cost as follows:

	Per year for 1st 3 years	Per year— next 22 years	Per year thereafter
Federal.....	\$34,700	\$18,000	-----
Non-Federal.....	69,300	36,000	\$54,000
Total.....	104,000	54,000	54,000

*Project economics.*—Overall project including initial construction completed 1953 at total cost of \$705,000.

	Exclusive of deferred groins	Including groins	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$31,000	\$79,700	-----
Maintenance.....		22,900	-----
Beach nourishment.....	<sup>1</sup> 57,000	37,000	-----
Total.....	88,000	139,600	-----
<b>Annual benefits:</b>			
Prevention of damages.....			\$216,000
Increased earning power of property.....			155,000
Recreational.....			28,000
Total.....			399,000

<sup>1</sup> Federal participation; \$34,700 per year for 3 years, thence \$18,000 per year for 22 years.

*Benefit-cost ratio.*—4.5 (overall project without deferred groins): 2.9 (overall project including groins).

*Local cooperation.*—Continuation of conditions of local cooperation required for Federal participation in the existing project, but with Federal assistance in the costs of periodic beach nourishment as recommended.

*Comments of State and Federal agencies.*—

State of Virginia: Favorable.

Department of the Interior: Favorable.

*Comments of Bureau of the Budget.*—No objection.

*Remarks.*—Virginia Beach is the largest and the most popular resort center in Virginia and is extensively developed for tourist trade. Modification of the existing beach erosion control project at Virginia Beach to provide for Federal participation in periodic replenishment of beach fill for a period of 25 years is justified and in accordance with the policy established by Public Law 826, 84th Congress. The committee notes that modification is in accordance with existing law and is amply justified.

**FORT MACON, ATLANTIC BEACH AND VICINITY, NORTH CAROLINA—BEACH EROSION CONTROL**

(H. Doc. 555, 87th Cong.)

*Location.*—The study area comprises about 5 miles of shore fronting the Atlantic Ocean on the outer banks of North Carolina, immediately southwest of Beaufort Inlet, located approximately half-way between the Virginia and South Carolina boundaries.

*Report authorized by.*—Section 2 of River and Harbor Act approved July 3, 1930 (cooperative study provisions).

*Existing project.*—No existing Federal beach erosion control project.

*Beach erosion control problem.*—Erosion and recession of the shore has seriously reduced the width of beaches in the area; and private resort areas, public recreational facilities, and historic Fort Macon have been made seriously vulnerable to storm wave damages.

*Recommended plan of improvement.*—Restore approximately 1.5 miles of beach at Fort Macon State Park to a berm width of 100 feet by direct placement of sand fill; construct a stone groin about 1,670 feet in length, about 250 feet of stone revetment and about 530 feet of stone seawall; and provide Federal participation in subsequent periodic nourishment of the beach for a period of 10 years.

*Estimated costs (May 1961 price level).*

Federal.....	\$194, 000
Non-Federal.....	389, 100
<b>Total.....</b>	<b>583, 100</b>

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$7, 300	\$18, 500	\$25, 800
Maintenance.....	0	1, 000	1, 000
Beach nourishment.....	12, 400	4, 800	7, 200
<b>Total.....</b>	<b>9, 700</b>	<b>24, 300</b>	<b>34, 000</b>
<b>Annual benefits:</b>			
Prevention of damages.....			5, 300
Prevention of land loss.....			30, 000
Recreation.....			54, 500
<b>Total.....</b>			<b>89, 800</b>

<sup>1</sup> For 1st 10-year period.



*Benefit-cost ratio.*—2.7.

*Local cooperation.*—Obtain approval by the Chief of Engineers for plans and specifications and arrangements for prosecuting remaining work prior to its commencement; and furnish satisfactory assurances that local interests will: maintain the protective measures and provide periodic beach nourishment during the economic life of the project, control water pollution to the extent necessary to safeguard the health of bathers, and maintain continued public ownership of the shore upon which Federal participation is based and their continued administration for public use.

*Comments of State and Federal agencies.*—

State of North Carolina: Favorable.

Department of the Interior: Favorable.

*Comments of Bureau of the Budget.*—No objection.

*Remarks.*—The recommended improvements will return large benefits to an extensive area and will permit increase recreational use of historic Fort Macon State Park. The restored beach will also alleviate storm losses to the park and adjacent areas. The committee considers that authorization of this work is desirable.

PALM BEACH COUNTY FROM MARTIN COUNTY LINE TO LAKE WORTH INLET  
AND FROM SOUTH LAKE WORTH INLET TO BROWARD COUNTY LINE,  
FLORIDA

(H. Doc. 164, 87th Cong.)

*Location.*—The area comprises two reaches of shore totaling 29.3 miles in length on the southeast coast of Florida including the towns of Jupiter, Juno Beach, Riviera Beach, Palm Beach Shores, Boynton Beach, Delray Beach, Highland Beach, and Boca Raton, all in Palm Beach County.

*Report authorized by.*—Section 2 of River and Harbor Act approved July 3, 1930 (cooperative study provisions).

*Existing project.*—No existing Federal beach erosion control project within study limits. Project authorized May 17, 1950 (HD 772/80/2), and modified July 3, 1958 (HD 342/85/2), provides for Federal participation in restoration and nourishment of a protective beach fronting Palm Beach Island between Lake Worth Inlet and South Lake Worth Inlet, and in construction and operation of a sand bypassing plant at Lake Worth Inlet. The bypassing plant has been constructed and operated since 1958.

*Beach erosion control problem.*—Deficiency in natural supply of beach sand, further aggravated by obstruction at inlets, has resulted in instability and recession of the shoreline, permitting damages to property and improvements which include public highways and recreational beach areas.

*Recommended plan of improvement.*—The plan provides for restoration of a protective beach to a general width of 100 feet with beam elevation 10 feet above mean low water on the shores between Martin County line and Jupiter Inlet, Jupiter Inlet and Lake Worth Inlet, and South Lake Worth Inlet and Boca Raton Inlet, and subsequent periodic nourishment thereof including operation of the existing sand transfer plant at South Lake Worth Inlet.

*Estimated costs (1958 price levels).—*

	Federal	Non-Federal	Total
Martin County to Jupiter Inlet.....	\$8,600	\$260,400	\$269,000
Jupiter Inlet to Lake Worth Inlet.....	42,100	504,200	546,300
South Lake Worth Inlet to Boca Raton Inlet.....	78,100	2,218,400	2,296,500
Total.....	128,800	2,983,000	3,111,800

*Project economics.—*

	Annual charges <sup>1</sup>	Annual benefits	Benefit-cost ratio
Martin County to Jupiter Inlet.....	\$12,100	\$15,020	1.2
Jupiter Inlet to Lake Worth Inlet.....	57,740	75,560	1.3
South Lake Worth Inlet to Boca Raton Inlet.....	242,000	351,700	1.5

<sup>1</sup> Include total of \$179,300 for periodic nourishment and \$20,100 for operation of sand transfer plant of which the Federal share is estimated at \$7,700 per year for the former and \$700 per year for the latter for initial 10-year period.

*Local cooperation.*—Obtain approval by Chief of Engineers for plans and specifications and arrangements for prosecuting the work prior to its commencement; and furnish satisfactory assurances that they will: maintain continued public ownership of publicly owned shores and their administration for public use, maintain the protective measures during their economic life and provide periodic nourishment at suitable intervals including operation of the sand-transfer plant at South Lake Worth Inlet, and control water pollution to the extent necessary to safeguard bathers.

*Comments of State and Federal agencies.*—

State of Florida: Favorable.

Department of the Interior: Favorable.

*Comments of Bureau of the Budget.*—No objection.

*Remarks.*—The residential and recreational development of this area is growing rapidly. The recommended improvements will alleviate future damage to the shores and will permit full use of the recreational potential of the area. The committee notes the Federal participation in operation of the sand transfer plant constructed by local interests in 1958 and in periodic nourishment of the shore. The committee considers that the overall plan is warranted.

## VIRGINIA KEY AND KEY BISCAYNE, FLA., BEACH EROSION CONTROL

(H. Doc. 561, 87th Cong.)

*Locations.*—In Dade County, Fla., comprising the Atlantic Ocean shores of Virginia Key and Key Biscayne, two of a chain of barrier islands, just south of the entrance to Miami Harbor.

*Report authorized by.*—Section 2 of the River and Harbor Act approved July 3, 1930 (cooperative study provisions).

*Existing project.*—No existing Federal beach erosion control project.

*Beach erosion control problem.*—Virginia and Biscayne Keys are primary recreation areas for Metropolitan Dade County and the city of Miami. Instability and recession of the ocean-front shores have

resulted in loss of public beach areas, both for those areas which are presently developed as parks and those for which development in the very near future will be required to provide for anticipated greatly increased recreational use.

*Recommended plan of improvement.*—Provides for periodic nourishment of 1.8 miles of public beach on Virginia Key and 1.9 miles on Key Biscayne at estimated rates of 80,000 and 65,000 cubic yards per year, respectively, and deferred construction of three groins on Virginia Key, and one groin on Key Biscayne until such time as experience gained in nourishing the beaches should indicate the need for the groins.

*Estimated costs (spring 1961 price levels).*—

	Virginia Key	Key Biscayne	Total
Deferred groins:			
Federal.....	\$182, 000	\$38, 000	\$220, 000
Non-Federal.....	365, 000	77, 000	442, 000
Total.....	547, 000	115, 000	662, 000
Periodic nourishment:			
Federal.....	<sup>1</sup> 25, 300	<sup>1</sup> 22, 700	
Non-Federal.....	<sup>2</sup> 50, 700	<sup>2</sup> 45, 300	
Total.....	76, 000	68, 000	

<sup>1</sup> Per year for 1st 10 years.

<sup>2</sup> Per year for 1st 10 years (full total thereafter).

*Project economics.*—

	Virginia Key	Key Biscayne
Annual charges:		
Deferred groins:		
Interest and amortization.....	\$20, 100	\$4, 100
Maintenance.....	4, 700	1, 000
Total (deferred).....	24, 800	5, 100
Beach nourishment (without groins).....	76, 000	68, 000
Annual benefits:		
Prevention of damages.....	1, 600	1, 600
Recreation.....	214, 000	225, 000
Total.....	215, 600	226, 600

*Benefit-cost ratio.*—Computed on the basis of nourishment only as the deferred groins will be constructed only if total annual charges for both groins and nourishment are less than annual charges for beach nourishment alone. Virginia Key, 2.8; Key Biscayne, 3.3.

*Local cooperation.*—Obtain approval by the Chief of Engineers for plans and specifications and arrangements for prosecuting the work prior to its commencement; and furnish satisfactory assurances that local interests will: control water pollution to the extent necessary to safeguard the health of bathers, and maintain continued public ownership of the shores upon which Federal participation is based and their administration for public use. In the event that groins are found to be needed and justified, furnish assurances that for these works they will meet the conditions of local cooperation specified above; maintain the groins; and provide such related periodic beach nourishment as may be necessary to meet project objectives, subject to the recommended Federal participation for the 10-year initial period.



*Comments of State and Federal agencies.—*

City of Miami: Favorable.

Dade County: Favorable.

State of Florida: Favorable.

Department of the Interior: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.—*Restoring and stabilizing protected beaches at these localities is essential to fulfill public use of these shores and is well justified by anticipated benefits. The committee notes that the plan would defer construction of groins until such time as experience gained in nourishing the beaches should demonstrate the need therefor. The committee considers that authorization of the groins on this basis and periodic nourishment is warranted.

SAN JUAN AND VICINITY, PUERTO RICO, BEACH EROSION CONTROL

(H. Doc. 575, 87th Cong.)

*Location.—*On the north shore of the island of Puerto Rico, fronting on the Atlantic Ocean between Punta Salinas on the west and Punta Vacia Talega on the east, and including the shores of San Juan Harbor which is about 30 miles from the eastern extremity of the island. Municipalities of Toa Baja, Catano, San Juan, Carolina, and Loiza, comprising the greater part of Metropolitan San Juan, are included.

*Report authorized by.—*Section 2 of the River and Harbor Act approved July 3, 1930 (cooperative study provisions).

*Existing project.—*No existing Federal beach erosion control project.

*Beach erosion control problem.—*A large part of the study area is densely populated, and includes public recreational beaches, luxury hotels and historic buildings and monuments. Erosion of the shores has threatened upland properties with damages to both public and private improvements, including public highways, and has reduced recreational beach area.

*Recommended plan of improvement.—*At Condado and Ocean Park widen by direct placement of sand fill approximately 0.9 mile of beach to a berm width 30 feet greater than now exists at elevation 7 feet above mean low water, construct a rubble-mound breakwater 129 feet long at the west end of the reach, and provide Federal participation in subsequent periodic nourishment of the beach for a period of 10 years.

*Estimated costs (summer 1960 price levels).—*

Federal	-----	\$65, 400
Non-Federal	-----	731, 500
Total	-----	796, 900

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$2, 600	\$26, 600	\$29, 200
Maintenance (breakwater).....	0	1, 900	1, 900
Periodic nourishment.....	<sup>1</sup> 7, 400	82, 700	90, 100
Total.....	10, 000	111, 200	121, 200
Annual benefits:			
Prevention of damages.....			26, 700
Property enhancement.....			82, 500
Recreation.....			61, 500
Total.....			170, 700

<sup>1</sup> For 1st 10-year period only.

*Benefit-cost ratio.*—1.4.

*Local cooperation.*—Obtain approval by the Chief of Engineers for plans and specifications and arrangements for prosecuting remaining work prior to its commencement, and furnish satisfactory assurances that local interests will maintain the protective measures and provide periodic beach nourishment during the economic life of the project; take necessary action to prevent removal of sand from the littoral zone in the region for commercial purposes; control water pollution to the extent necessary to safeguard the health of bathers; and maintain continued public ownership or continued availability for public use of the shores upon which the Federal participation is based and their continued administration for public use.

*Comments of local and Federal agencies.*—

Commonwealth of Puerto Rico: Favorable.

Department of the Interior: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—Restoration of the beaches near San Juan will provide important recreational and shore protection measures which are needed to prevent further damage. The committee considers that the recommended plan is justified and is essential to the economic development of the area.

LAKE ERIE SHORELINE FROM THE MICHIGAN—OHIO STATE LINE TO  
MARBLEHEAD, OHIO—BEACH EROSION CONTROL

(H. Doc. 63, 87th Cong.)

*Location.*—Area comprises the westernmost 35 miles of the south shore of Lake Erie and the Maumee Bay shore adjacent to the city of Toledo.

*Report authorized by.*—Section 2 of River and Harbor Act approved July 3, 1930 (cooperative study provisions).

*Existing project.*—No existing beach erosion control project.

*Beach erosion control problem.*—Shores are principally low lying marshy or reclaimed marsh areas fronted by low barrier beaches of fine sand. The barrier beaches have a continuous history of erosion and in a number of places have been breached or so deteriorated that the marshes are directly exposed to waves from Lake Erie and recreational park area has been seriously reduced.

*Recommended plan of improvement*—Restore and protect the shore at Crane Creek State Park by restoring 17,800 feet of sand barrier beach to a 50-foot width at elevation 9 feet above low water datum by placement of suitable sand fill, constructing 36 groins spaced generally at 500-foot intervals and extending lakeward about 300 feet (construction of 26 of the groins to be deferred pending determination of the need thereof), and providing Federal participation in periodic nourishment of the beach for the period during which groins are deferred.

*Estimated costs (price level of November 1959).—*

Federal.....	\$658, 500
Non-Federal.....	1, 317, 200
<b>Total.....</b>	<b>1, 975, 700</b>

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$23, 800	\$46, 500	<sup>1</sup> \$70, 300
Maintenance (groins).....	0	6, 000	<sup>1</sup> 6, 000
Periodic nourishment.....	<sup>2</sup> 40, 000	80, 000	<sup>3</sup> 120, 000
<b>Total.....</b>	<b>63, 800</b>	<b>132, 500</b>	<b>196, 300</b>
<b>Annual benefits:</b>			
Recreational.....			257, 250
Land loss prevention.....			500
<b>Total.....</b>			<b>257, 750</b>

<sup>1</sup> Includes charges for all 36 groins.

<sup>2</sup> For period during which construction of 26 groins is deferred.

<sup>3</sup> Includes nourishment required with 26 groins deferred.

*Benefit-cost ratio.—1.3.*

*Local cooperation.*—Obtain approval by the Chief of Engineers of plans and specifications and arrangements for prosecuting the work prior to its commencement; provide parking and service facilities necessary to realize expected recreational benefits; furnish satisfactory assurances that local interests will: Maintain the protective measures during their economic life, including periodic nourishment; control water pollution to the extent necessary to safeguard bathers; and maintain continued public ownership of the shore and its administration for public use during the economic life of the project (50 years).

*Comments of State and Federal agencies.—*

State of Ohio: Favorable.

Department of Interior: Favorable.

*Comments of Bureau of the Budget.*—No objection.

*Remarks.*—The recommended improvement consists of restoration of 17,800 feet of publicly owned sand barrier beaches along the Lake Erie shore at Crane Creek State Park, Ohio. The beaches have a continuous history of erosion and in a number of places have been breached. The committee notes that restoration and stabilization of the protective beach is necessary for the protection of public property and to restore needed recreational beach widths. The committee believes that the anticipated benefits justify the project.



SHEFFIELD LAKE COMMUNITY PARK, SEFFIELD LAKE VILLAGE, OHIO,  
BEACH EROSION CONTROL

(H. Doc. 414, 87th Cong.)

*Location.*—On the south shore of Lake Erie about 20 miles west of Cleveland, Ohio.

*Report authorized by.*—Section 2 of River and Harbor Act approve July 3, 1930 (cooperative study provisions).

*Existing project.*—No existing Federal beach erosion control project.

*Beach erosion control problem.*—Erosion of the protective beach and bluffs precludes full development and recreational use of a publicly owned community park. Restoration of the beach and stabilization of the shore is necessary to provide adequate recreational beach area and protect park facilities.

*Recommended plan of improvement.*—Provides for restoration of a protective beach with minimum berm width of 40 feet at elevation 8 feet above low water datum along the 800 feet of park frontage and construction of two groins.

*Estimated costs ( July 1960 price levels ).—*

Federal.....	\$100, 300
Non-Federal .....	200, 700
Total.....	301, 000

*Project economics.*—

**Annual charges :**

Interest and amortization.....	\$13, 400
Maintenance (groins).....	1, 000
Beach nourishment.....	6, 400
Total.....	20, 800

**Annual benefits :**

Elimination of protective costs by present methods.....	1, 300
Recreation.....	26, 000
Total.....	27, 300

*Benefit-cost ratio.*—.3

*Local cooperation.*—Obtain approval by the Chief of Engineers for plans and specifications and arrangements for prosecuting the work prior to its commencement; and furnish satisfactory assurances that local interests will maintain the protective measures during their economic life, control water pollution to the extent necessary to safeguard the health of bathers, maintain continued public ownership of the shore and its administration for general public use, and relocate the storm sewer outfall at their own expense.

*Comments of State and Federal agencies.*—

State of Ohio: Favorable.

Department of the Interior: Favorable.

*Comments of Bureau of the Budget.*—No objection.

*Remarks.*—Restoration and stabilization of the protective beach and stabilization of the bluff at this location is necessary for the protection of public property and to provide a needed recreational area

in this thickly populated area. The committee notes that provision of the project consisting of beach fill and periodic replenishment is needed and amply justified.

STATE OF CALIFORNIA, APPENDIX VII, SPECIAL INTERIM REPORT ON VENTURA AREA BEACH EROSION CONTROL

(H. Doc. 458, 87th Cong.)

*Location.*—The study area, located in Ventura County, comprises about 4 miles of shore on the Pacific Ocean, lying between the Ventura and Santa Clara Rivers, about 55 miles northwest of Los Angeles.

*Report authorized by.*—Section 2 of the River and Harbor Act approved July 3, 1963 (cooperative study provisions).

*Existing project.*—A Federal project authorized September 3, 1954 (H. Doc. 29, 83d Cong., 1st sess.) provided for Federal participation in construction of three groins to protect about 1 mile of shore in the northwestern portion of San Buenaventura State Park. Within his discretionary authority, the Chief of Engineers, U.S. Army, in August 1961, approved modification of the existing project to shift the locations of the three authorized groins to the downdrift (southeastern) portion of the State park frontage where the problem has become more acute. These groins are planned for construction by the State of California in 1962.

*Beach erosion control problem.*—Continuing erosion of the protective and recreational beach at San Buenaventura State Park has progressed in recent years to such extent that use of the park is impaired and public and private improvements in the Pierpont residential community landward of the park are threatened with destruction. Presently authorized protective structures are inadequate to provide the protection required under existing conditions.

*Recommended plan of improvement.*—In lieu of the existing project, provides for Federal participation in the construction of nine groins and artificial placement of beach fill along approximately 2 miles of shore.

*Estimated costs (1961 price level).*—

Federal.....	\$515, 000
Non-Federal.....	1, 030, 000
Total.....	1, 545, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$18, 720	\$48, 090	\$66, 810
Maintenance:			
Groins.....		6, 000	6, 000
Sand fill.....		10, 000	10, 000
Total.....	18, 720	64, 090	82, 810
Annual benefits:			
Prevention of loss:			
Private lands and improvements.....			76, 450
Public lands and improvements.....			48, 880
Recreation.....			60, 000
Total.....			185, 330

*Benefit-cost ratio.*—2.2.

*Local cooperation.*—Obtain approval by the Chief of Engineers for plans and specifications and arrangements for prosecuting the work prior to its commencement; and furnish satisfactory assurances that local interests will maintain the protective measures during their economic life, control water pollution to the extent necessary to safeguard the health of bathers, and maintain continued public ownership of the shores upon which Federal aid is based and their administration for public use.

*Comments of State and Federal agencies.*—

State of California: Favorable.

Department of the Interior: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The proposed improvement appears to be well justified for correcting the continuing erosion of the protective and recreational beach at San Buenaventura State Park which has progressed in recent years to such an extent that use of the park is impaired and public and private improvements in the area are threatened with destruction. The committee endorses the proposed project.

ORANGE COUNTY (SAN GABRIEL RIVER TO NEWPORT BAY), CALIF., BEACH  
EROSION CONTROL

(H. Doc. —, 87th Cong.)

*Location.*—Area comprises the northernmost 17 miles of Orange County, Calif., fronting on the Pacific Ocean immediately southeast of the Los Angeles-Long Beach Harbor complex.

*Report authorized by.*—Section 2 of River and Harbor Act approved July 3, 1930 (cooperative study provisions); and section 112 of River and Harbor Act (Public Law 85-500) approved July 3, 1958.

*Existing project.*—Beach erosion control projects authorized September 3, 1954 (HD 349/83/2) provide for initial widening of the beach and construction of one groin at Seal Beach and initial placement of 1 million-cubic-yard feeder beach at Surfside.

*Beach erosion control problem.*—Flood control structures on Los Angeles, San Gabriel, and Santa Ana Rivers have nearly eliminated natural supply of sand to the shore. Offshore breakwater at Los Angeles-Long Beach Harbor and entrance jetties at Anaheim Bay Harbor effectively prevent littoral drift from reaching the problem area south thereof. The three types of improvements, acting in concert, have precipitated a serious shore erosion problem south of Anaheim Bay Harbor which is progressing southeastward threatening eventual destruction of highly desirable recreational areas and improved private property. Authorization for the present study directed that the problem be studied to determine the extent of Federal aid to be granted in equity without regard to limitations of existing Federal law applicable to beach erosion control.

*Recommended plan of improvement.*—In lieu of existing Federal beach erosion control project for Surfside, place on the beach in Surfside-Sunset Beach area about 3 million cubic yards of sand to restore 9,200 feet of beach in Surfside-Sunset Beach area and provide feeder beach to nourish downdrift shores, construct an offshore breakwater about 2,600 feet in length at Newport Beach, at estimated 5-year in-



tervals transfer estimated 1,500,000 cubic yards of sand from lee of breakwater to feeder beach at Surfside-Sunset Beach area, and provide additional sand from other sources at an estimated rate of 50,000 cubic yards per year to make up deficiencies due to losses.

*Estimated costs (1961 price levels).*

Federal.....	\$2, 845, 000
Non-Federal.....	1, 405, 000
<b>Total.....</b>	<b>4, 250, 000</b>

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$81, 200	\$57, 800	\$139, 000
Breakwater maintenance.....	14, 100	6, 900	21, 000
Periodic nourishment.....	301, 500	148, 500	450, 000
<b>Total.....</b>	<b>396, 800</b>	<b>213, 200</b>	<b>610, 000</b>
<b>Annual benefits:</b>			
Damages prevented.....			1, 941, 000
Recreational (restored beach area).....			280, 000
<b>Total.....</b>			<b>2, 221, 000</b>

*Benefit-cost ratio.—3.6.*

*Local cooperation.*—Obtain approval by the Chief of Engineers for plans and specifications and arrangements for prosecuting all or any one phase of the work prior to commencement of such work; and furnish satisfactory assurances that local interests will maintain the protective measures and provide periodic nourishment of the protective beach with Federal assistance during the economic life of the project, control water pollution to the extent necessary to safeguard bathers, and maintain continued public ownership of public shores and their administration for public use.

*Comments of State and Federal agencies.—*

State of California: Favorable.

Department of the Interior: Urges that borrow material be obtained from offshore areas or from maintenance dredging operations and not from the marsh areas.

*Comments of the Bureau of the Budget.*—No objection. However, the Bureau sets forth in detail its views concerning cost sharing in measures for mitigating adverse effects of previously constructed projects.

#### ORANGE COUNTY (SAN GABRIEL RIVER TO NEWPORT BAY), CALIF., BEACH EROSION CONTROL

*Remarks.*—The committee recognizes the need for correction of the serious shore erosion problem which threatens eventual destruction of highly desirable recreational areas and improved private property. The unusual nature of this problem is indicated by the fact that the authorization for the current study provided that the extent of Federal aid be determined on the basis of equity without regard to limitations of existing beach erosion law.

## SECTION 102

## REIMBURSEMENT—BEACH EROSION CONTROL PROJECTS

This section is similar to that in previous river and harbor acts. It provides for reimbursement of local interests for work done by them on beach erosion control measures authorized in this bill subsequent to initiation of the studies which form the basis for these measures. Certain restrictions and limitations are included to safeguard the interests of the United States. This section provides a reasonable basis for proceeding with necessary beach erosion control measures at time of need, so that costly beach restoration or irrevocable loss of beaches may be avoided. The provision has been considered equitable in previous legislation, and the committee considers that it also should apply to beach erosion control measures included in this bill, subject to the provisions of section 103.

## SECTION 103

## FEDERAL PARTICIPATION IN SHORE PROTECTION

*Purpose of section 103.*—This section would amend existing laws to permit increased Federal participation in shore protection projects and investigations, and provide for changes in procedures to expedite Federal action in planning and undertaking protection for the most endangered coastal areas, beyond the legislative authorities now available. It would provide for increased Federal participation in four important aspects of project development:

(1) Studies would be made entirely at Federal cost rather than on a 50-50 Federal—non-Federal cooperative basis as at present. This is desirable because it would enable the Corps of Engineers to study entire physiographic reaches of shores where the problems and their solution can be treated as an entity, rather than on the fragmented basis required by adoption to local governmental boundaries.

(2) The Federal share of the costs of protection of publicly owned or used non-Federal shore frontage would be increased from one-third of the costs to one-half.

(3) The Federal Government could assume not more than 70 percent of the total costs of protecting the frontage of certain State, county, or municipal parks and conservation areas which meet defined criteria of public interest.

(4) Authority to undertake meritorious small shore protection and beach erosion control projects without specific authorization by Congress, and with appropriate limitations, would be granted to the Secretary of the Army and the Chief of Engineers, similar to that already provided for small flood control and navigation projects.

These changes in the Federal interest would place shore protection studies on a comparable basis for planning with other water resource investigations; encourage and assist local interests to cooperate more fully in projects by reducing the present financial burden of cooperation; and, perhaps most important of all, designate shoreline protection, conservation, and development as a recognized field for Federal participation.



In addition, section 103 would authorize reimbursement of local interests for work done by them on authorized projects which individually do not exceed \$1 million in total cost after initiation of the survey studies which form the basis for the project. This clause would provide continuing authority, with specified controls, in place of the special authority of section 102 which has been included in this and in recent omnibus bills for shore protection projects authorized therein.

*Discussion.*—The storms and high tides of March 6 to 8, 1962, cause unprecedented damage to the shores and to developments thereon from Florida to Long Island. Much of it occurred in the States of New York, New Jersey, Delaware, and Maryland. Available estimates indicated that total losses to public and private property approximated \$200 million. Human suffering was extensive, and many persons lost their homes and investments on the shores. The prolonged duration of high water levels also eroded beaches and protective dunes extensively and barrier islands were overflowed so that many areas and properties were exposed to wave and water damages not previously experienced even in hurricanes.

Most individuals and local communities have insufficient resources to meet such catastrophies. The Federal Office of Emergency Planning, assisted by other Federal agencies, with funds granted by the President under Public Law 875, 81st Congress, undertook emergency cleanup and repairs, but work under this law cannot extend to the permanent works needed for protection against major storms.

In some areas existing requirements for local cooperation have retarded full accomplishment of authorized work where local interests would be required to bear a large part of the total costs. Section 103 would increase the Federal share of costs to approximately one-half of the total costs of protecting publicly owned or used property, and would make the new provisions applicable to authorized projects which have not been completed prior to the date of approval of this act. Where conservation areas are involved the Federal share would be more than 50 percent. The increase would not be unduly burdensome to the Federal Government in view of the benefits all the public receives from the shores and beaches of our coasts.

*Remarks.*—The extension of the Federal interest in shore protection, conservation, and development provided by section 103 is considered fully in the national interest and an important step forward in Federal-State cooperation in the national resources field. The committee would expect that the provisions of section 103 pertaining to new work costs would be applied to the beach erosion control projects and measures authorized by the bill.

## SECTION 104

### AQUATIC PLANT CONTROL PROJECT

*Purpose of section 104.*—Section 104 amends the aquatic plant control project as authorized by the River and Harbor Act of 1958 to provide that costs for research and for planning prior to construction shall be borne fully by the United States. Planning prior to construction includes all planning costs incurred for the project in any area prior to the initiation of project operations in that area and any additional costs incurred for reports to Congress on the progress of the project.



The requirements of the authorized project for sharing of costs by local interests are not otherwise changed.

*Discussion.*—The project for aquatic plant control, authorized by the River and Harbor Act of 1958 as a joint endeavor of Federal and State agencies, requires that local interests bear 30 percent of the costs of the project. This requirement has created administrative problems in the distribution of costs for research and advance planning for which no practicable solution has been found.

Research in aquatic plant control methods performed for the project by the cooperating Federal agencies falls within the basic functions and responsibilities of those agencies and has a broad general applicability to the programs of those agencies other than the aquatic plant control project. Generally, the costs of these related and allied Federal research programs are entirely a Federal expense. It is considered appropriate, therefore, that the costs of the research feature of the project performed by the Federal agencies should be assumed by the Federal Government.

At present only three of the eight States in the project area are participating fully in the project along with lesser governmental agencies in two additional States. The participating States and local governmental agencies are contributing their share of planning costs for areas within their respective jurisdiction but no satisfactory solution has been found for allocation and payment of such costs in areas of nonparticipation wherein one State or local interest may not expend its funds for project work performed in and for the benefit of areas not under its jurisdiction. Since these overall planning costs are essential to the project, it is considered proper that such costs be borne by the Federal Government, recognizing that costs for project planning preliminary to participation by the States in the program are otherwise borne by the Federal Government.

*Remarks.*—The committee considers that the provisions of section 104 will facilitate undertaking of the needed aquatic plant control project.

## SECTION 105

### ILLINOIS AND MISSISSIPPI CANAL

The River and Harbor Act of 1958 authorized transfer of the now obsolete Federal project known as the Illinois and Mississippi Canal to the State of Illinois. This is an old navigation project which has long been in disuse, insofar as commercial navigation is concerned. It is used extensively, however, by small pleasure craft. The 1958 act authorized \$2 million to place the structures in safe condition to permit complete abandonment. The item in the present bill increases the authorization of \$2,800,000. The committee considers this increase in authorization to be desirable.

## SECTION 106

REVISION OF COMPILATION OF PRELIMINARY EXAMINATION, SURVEY, AND  
REVIEW REPORTS

This section authorizes the Secretary of the Army to prepare and transmit to Congress a compilation of preliminary examination, survey, and review reports on river and harbor and flood control improvements. Such examination, survey, and review reports have been made by the Corps of Engineers only in response to directives from Congress. Similar compilations have previously been made, the latest being published in House Document 219, 82d Congress.

The compilation is the only printed record of all examination, survey, and review reports prepared and is of value to the Public Works Committees of the Senate and House of Representatives, other Congressional committees, Members of the Congress, the several branches of the Government, the Corps of Engineers, and organizations and individuals interested in river and harbor and flood control investigations.

The necessary information is available in the office of the Board of Engineers for Rivers and Harbors and the only expense will be for compilation printing. It is recommended that the report be printed as a congressional document.

Previous legislation on this matter detailed the inclusive page numbers to be revised, to assure that a complete alphabetical list of the reports was prepared, rather than a supplement listing the reports prepared since the last complete report was issued. The committee desires the report prepared in compliance with this section to be a complete report similar to House Document 214, which includes reports completed through June 30, 1950.

## SECTION 107

## LOCK AND DAM NO. 3, BIG SANDY RIVER, KY. AND W. VA.

This section would authorize the Chief of Engineers to carry forward other repairs and restoration improvements necessary to protect lock and dam No. 3 of the Big Sandy River in Kentucky and West Virginia. The River and Harbor Act of 1956 authorized the transfer of this lock for use in connection with a municipal water supply for the communities of Louisa, Ky., and Fort Gay, W. Va. Floods have occurred recently which have caused damage to the structures and it is the recommendation of the committee that repair measures consisting of extension of the existing dam to the riverbank and partial rebuilding and protection of eroded banks should be carried forward. The total works to be undertaken would cost an estimated \$200,000. It is understood that this emergency work which is being authorized would in no way affect the condition that local interests shall maintain and operate the structure.



## SECTION 108

## NAVIGATION SURVEYS

This section is similar to that in previous River and Harbor Acts providing for authorization of needed surveys at specifically named localities. In addition, it provides basis for surveys of the coastal areas of the United States and its possessions, including the shores of the Great Lakes, in the interest of beach erosion control, hurricane protection, and related purposes, in accordance with survey procedures established in section 103 of the bill, and subject to authorization by resolutions of the Public Works Committees of the Congress.

This section authorizes the Secretary of the Army to make survey investigations for navigation and allied purposes at the following named localities:

Falmouth Harbor, Maine.

Channel between Point Shirley and Deer Island, Mass.

Little Egg Inlet, N.J.

Brigantine Inlet, N.J.

Corsons Inlet, N.J.

Kings Bay deepwater channel, Georgia.

Auglaize River at Wapakoneta, Ohio.

## SECTION 109

This section identifies title I of the bill as the River and Harbor Act of 1962.

## TITLE II—FLOOD CONTROL

Title II includes the flood control projects, project modifications, basin authorization increases, and certain miscellaneous matters that have been considered, and amendments to existing law believed advisable at this time. These items will provide the basis for a logical and orderly continuation of the national program for flood control throughout the United States and its possessions for the next 2 years.

The first Federal flood control program began on the lower Mississippi River in 1879 with creation of the Mississippi River Commission and authorization for Federal participation in that project. The California Debris Commission was established in 1893, and the flood program on the Sacramento River adopted in 1917. The present project for improvement of the Mississippi River in its alluvial valley was approved by the Congress in 1928, and has been amended from time to time as deemed necessary. The experience gained in the early work on the Sacramento and Mississippi Rivers brought forth the recognition of the need for protecting lives and property from floods in other sections of the country.

Flood control as a national policy had its inception in the Flood Control Act of 1936, which stated as a declaration of policy that floods constituted a menace to national welfare and that it was the sense of Congress that control of floods is a proper activity of the Federal Government in cooperation with States and local interests, where the benefits are in excess of the estimated costs and if the lives and social security of the people are otherwise adversely affected. From that



beginning has grown the important flood control program undertaken by the United States. The committee is impressed with the notable progress that has been made on the flood control program to date, and considers the additional authorizations included in this bill a very valuable addition to the overall program.

Although presently authorized projects are well dispersed throughout the country, there are many areas where flood problems are acute and which are now within the areas intended to be protected by authorized projects. Other areas subject to devastating floods are being studied and flood protection projects being developed.

It has long been recognized that flood control is only one of the purposes for which our water resources should be developed. Congress has recognized that full consideration should be given to a desirable improvement for the use and control of all the water resources, in addition to the specific purpose of flood control. In the opinion of the committee, the projects and basin plans included in this bill give full weight to the navigation possibilities; the development of hydroelectric power; the conservation of water for municipal, industrial, and agricultural uses; the utilization of recreation potentialities in connection with reservoirs; the preservation of fish and wildlife; the abatement of stream pollution; the improvement of water quality; and the provision of improved sanitary facilities. The committee feels that a program for flood control and navigation would not be comprehensive or in the best interests of the Nation unless all these factors were considered.

The major objective of flood control is the desirability of preventing damage to property and removal of the hazard to the loss of human life. Flood control also permits the most effective use of our valley lands, to allow for their best use and development, and a realization of the economic benefits that would accrue. The Flood Control Act of 1960 authorized a program for development of information on flood hazards in flood plain areas, so that such areas may be used effectively for their best purposes, without unnecessarily requiring needs for protective works. It is recognized that in certain instances flood control measures will permit new and additional activities in the valleys which would otherwise not be practicable, but would increase the economic advantages. In this respect, flood control is thought of as a positive force in economic development rather than as a corrective measure. The committee expects the flood plain information program to prove beneficial for dealing with localized flood problems at the State and local level.

The active flood-control program consists of 192 reservoirs and 525 local protection projects completed and in operation. These projects have prevented damages totaling \$10.6 billion since they were placed in operation. The damages prevented during 1961 amounted to \$868 million. There are at present 195 flood-control projects under construction. There are 32 multiple-purpose reservoir projects in operation producing power, and 30 additional ones under construction.

A regular feature of reservoir investigations includes the provision of water supply, based on long-range needs on the basis of population and economic activity projections, taking into account full basin capabilities, to insure that water supply demands can be met on schedule at acceptable cost. This procedure takes into account the role

of adequate supplies of water in supporting economic development. Of the total flood control and hydroelectric power projects, 19 reservoirs include water supply storage, which furnishes approximately 1,500,000 acre-feet of water to more than 40 communities.

The Federal interest in streamflow regulation for water quality control was established by Public Law 88, 87th Congress, and has led to intensification of efforts in this field. Many of the reservoir projects included in this bill include storage for this purpose. Experience in the operation of existing reservoir projects has demonstrated the effectiveness of streamflow regulation as a component of the program for water quality management. This feature appears to be a major requirement and function that must be met by our future reservoir projects. This is a valuable program which will insure continuing availability of ample quantities of water of good quality, and prove its value in contributing to sound economic growth.

The multiple-purpose reservoir projects in operation include hydroelectric power generating facilities of almost 7 million kilowatts. Projects under construction will have a generating capacity of 4.5 million kilowatts, and the ultimate capacity of projects completed and under construction will approximate 15.5 million kilowatts. The multiple-purpose projects included in this bill will include an ultimate onsite generating capacity of 3,105,000 kilowatts. In the field of hydroelectric power development, the Corps of Engineers in its investigations is giving consideration to the feasibility of pumped storage installation, as well as conventional type, to insure that full advantage is taken of opportunities for meeting power requirements at minimum cost.

Public Law 71, 84th Congress, authorized surveys of the Atlantic and gulf coasts to investigate methods of providing protection to certain areas from hurricanes. The flood damages from sea waters caused by hurricanes are just as real as the damages from floods caused by runoff from headwaters. The three hurricane-flood protection projects authorized by Public Law 500, 85th Congress, were the first projects authorized in a new Federal program, and the local financial participation in the cost of the projects was established as 30 percent of the total cost of such projects. It was realized at that time that the program for hurricane-flood protection might develop into a large program. Two additional projects of this nature were authorized in the Flood Control Act of 1960, and this bill includes authorization of 13 additional hurricane-flood protection projects.

The phenomenal growth of public use of Federal land and water areas in recent years, has led to a major emphasis on the recreational aspects of our water resource development projects. Included in the completed flood control, navigation, and hydroelectric projects are over 300 bodies of water providing outdoor recreation facilities. Facilities for public use have been furnished at a Federal cost of \$27,500,000 and a local cost of about \$56 million. During calendar year 1961, public use of these facilities reached a total of 120 million visits, more than was reported by any other Federal agency. The key role of water in outdoor recreational activity has been demonstrated by the use made of these completed reservoirs. Substantially all the reservoir projects included in this bill provide for balanced recreational development to insure effective public use and enjoyment of the po-



tential for general recreation and fish and wildlife purposes which they will create.

The committee has given serious and detailed consideration to the needs of every section of the country in formulating this bill. It believes that even with an available backlog of authorized flood control projects, there is constant need for review and reanalysis of the program, unceasing vigilance in carrying it out and keeping it up to date, and for authorization of modifications and additions, as major floods occur in certain areas, changes in engineering techniques are required, and to keep pace with economic changes as they occur. The flood control program grows and changes from time to time as the country grows, and more knowledge on the behavior of streams and floods is accumulated.

The committee is impressed by the fact that the value of many of the projects in the flood control program, as measured by the benefit-cost ratio, appears much higher when analyzed after they have been in operation than the value computed prior to their construction. It is realized that the Corps of Engineers bases its computation of the benefit-cost ratio for projects under study in accordance with accepted engineering and economic principles, but that the results can be no more accurate than the data upon which they are based. In many instances benefits are based upon relatively short and incomplete records of past flood history and damage.

The committee feels that the Corps of Engineers has taken a conservative approach of its analysis of the projects recommended in this bill, and it is highly gratified that the results of the program are showing more and more as time goes on that the Federal investment has been and will continue to be increasingly sound.

## ANALYSIS OF TITLE II

### SECTION 201

This section is the same as that which has been included in the last several flood control acts. It continues the provisions of local cooperation which have been in effect for some time, and provides that project authorization shall expire if local cooperation is not forthcoming within 5 years after appropriate notification.

### SECTION 202

This section is the same as that which has been included in the last several flood control acts. It continues the present procedure of submitting reports to the interested States and agencies prior to submission to Congress.

### SECTION 203

This section authorizes new projects, project modifications, and increased monetary authorizations for existing comprehensive basin plans. The preliminary language in this section is the same as in previous flood-control legislation. The individual items, with their project document numbers, where pertinent, are listed in the following table, with the estimated cost of new projects and of increased authorization for previously authorized projects shown in separate



columns. A discussion of the need for increased basin authorizations follows the description of individual projects after the table.

*Flood control*

Project	Document No.	New projects or modification	Increased basin authorizations
New England—Atlantic coastal area:			
Wareham-Marion, Mass.....	H. 548, 87th Cong.....	\$3,811,500	-----
Point Judith, R.I.....	H. 521, 87th Cong.....	2,414,000	-----
Narragansett Pier, R.I.....	H. 195, 87th Cong.....	1,152,000	-----
Long Island Sound:			
New London, Conn.....	H. 478, 87th Cong.....	2,401,000	-----
Westport, Conn.....	H. 412, 87th Cong.....	217,000	-----
Mystic, Conn.....	H. 411, 87th Cong.....	1,490,000	-----
Housatonic River Basin: Naugatuck River, Ansonia-Derby, Conn.....	H. 437, 87th Cong.....	5,620,000	-----
Hudson River Basin: Rondout Creek and Wallkill River, N.Y. and N.J.....	S. 113, 87th Cong.....	5,111,000	-----
New Jersey-Atlantic coastal area: Raritan Bay and Sandy Hook Bay, N.J.....	H. 464, 87th Cong.....	3,097,000	-----
Susquehanna River Basin:			
West Branch Susquehanna comprehensive basin plan.....	-----	-----	\$5,000,000
Lackawanna River, Pa.....	S. 141, 87th Cong.....	3,596,000	-----
Juniata River and tributaries, Pennsylvania.....	H. 565, 87th Cong.....	32,150,000	-----
Delaware River Basin: Delaware River N.Y., N.J., Pa., and Del.....	H. 522, 87th Cong.....	192,400,000	-----
Potomac River Basin: North Branch Potomac River, Md. and W. Va.....	H. 469, 87th Cong.....	50,965,000	-----
Middle Atlantic coastal area:			
Norfolk, Va.....	H. 354, 87th Cong.....	1,537,000	-----
Wrightsville Beach, N.C.....	H. 511, 87th Cong.....	345,000	-----
Carolina Beach and vicinity, North Carolina.....	H. 418, 87th Cong.....	739,000	-----
Cape Fear River Basin: Cape Fear River, N.C.....	H. 508, 87th Cong.....	25,143,000	-----
Apalachicola River Basin:			
Chattahoochee River, Westpoint Reservoir, Ga.....	H. 570, 87th Cong.....	52,900,000	-----
Flint River, Ga.....	H. 567, 87th Cong.....	151,820,000	-----
Central and southern Florida:			
Comprehensive basin plan.....	-----	-----	30,000,000
West Palm Beach Canal, Fla.....	S. 146, 87th Cong.....	3,220,000	-----
Boggy Creek, Fla.....	S. 125, 87th Cong.....	1,176,000	-----
South Dade County, Fla.....	S. 138, 87th Cong.....	13,388,000	-----
Shingle Creek, Fla.....	S. 139, 87th Cong.....	3,250,000	-----
Cutler Drain area, Florida.....	S. 123, 87th Cong.....	2,063,000	-----
Green Swamp region, Florida: Four River Basins, Fla.....	H. 585, 87th Cong.....	57,760,000	-----
Pascagoula River Basin: Chunky Creek, Chickasawhay, and Pascagoula Rivers, Miss.....	H. 549, 87th Cong.....	6,740,000	-----
Lower Mississippi River Basin:			
Mississippi River Delta at and below New Orleans, La.....	H. 550, 87th Cong.....	7,502,000	-----
Red River in Natchitoches and Red River Parishes, La.....	H. 476, 87th Cong.....	1,293,000	-----
Buffalo Bayou Basin: Vince and Little Vince Bayous, Tex.....	H. 441, 87th Cong.....	2,224,000	-----
Gulf of Mexico:			
Port Arthur and vicinity, Texas.....	H. 505, 87th Cong.....	23,380,000	-----
Freeport and vicinity, Texas.....	H. 495, 87th Cong.....	3,780,000	-----
Trinity River Basin:			
East Fork of Trinity River, Tex.....	H. 554, 87th Cong.....	23,760,000	-----
Fort Worth Floodway, Tex.....	H. 454, 87th Cong.....	5,148,000	-----
Brazos River Basin:			
Comprehensive basin plan.....	-----	-----	21,000,000
Clear Fork of Brazos River at Abilene.....	H. 506, 87th Cong.....	31,200,000	-----
Tularosa River: Alamogordo, N. Mex.....	H. 473, 87th Cong.....	2,040,000	-----
Rio Grande Basin: Las Cruces, N. Mex.....	S. 117, 87th Cong.....	3,350,000	-----
Arkansas River Basin:			
Comprehensive basin plan.....	-----	-----	182,000,000
Dardanelle lock and dam, Arkansas.....	-----	1,400,000	-----
Arkansas River, mile 455-mile 495, Oklahoma.....	-----	-----	-----
Verdigris River and tributaries, Oklahoma and Kansas.....	H. 563, 87th Cong.....	62,400,000	-----
Big Hill Creek, Kans.....	H. 577, 87th Cong.....	3,785,000	-----
Kaw Reservoir, Okla.....	S. 143, 87th Cong.....	83,230,000	-----
Cow Creek, Kans.....	H. 531, 87th Cong.....	1,560,000	-----
Arkansas River at Dodge City, Kans.....	H. 498, 87th Cong.....	2,133,000	-----
White River Basin:			
Comprehensive basin plan.....	-----	-----	11,000,000
Village Creek, Jackson and Lawrence Counties, Ark.....	H. 352, 87th Cong.....	1,968,000	-----
Village Creek, White River, and Mayberry districts, Arkansas.....	H. 577, 87th Cong.....	1,018,000	-----

*Flood control—Continued*

Project	Document No.	New projects or modification	Increased basin author- izations
<b>Red River Basin:</b>			
Red River below Denison Dam, McKinney Bayou, Maniece Bayou, Ark., and East Point, La.			
Lake Kemp, Wichita River, Tex.	S. 144, 87th Cong.	\$6,410,000	
Broken Bow Reservoir, Mountain Fork River, Okla.	S. 137, 87th Cong.	23,800,000	
Clayton, Tuskahoma, and Hugo Reservoirs, Kiamichi River, Okla.	S. 145, 87th Cong.	29,748,000	
Water quality study, Arkansas-Red River Basins.	S. 105, 87th Cong.	300,000	
<b>Missouri River Basin:</b>			
Comprehensive basin plan			\$140,000,000
Kaysinger Bluff Reservoir, Osage River, Mo.	H. 578, 87th Cong.	43,245,000	
Kansas River, Kans., Nebr., and Colo.	S. 122, 87th Cong.	88,070,000	
White Clay Creek, Atchison, Kans.	S. 151, 87th Cong.	3,495,000	
Papillion Creek and tributaries, Nebraska	H. 475, 87th Cong.	2,122,000	
Indian Creek, Iowa	H. 438, 87th Cong.	1,270,000	
Grant River and tributaries, North and South Dakota.	H. 574, 87th Cong.	2,670,000	
Floyd River, Iowa		750,000	
<b>Ohio River Basin:</b>			
Comprehensive basin plan			120,000,000
Kokosing River, Ohio	H. 220, 87th Cong.	2,438,000	
Wabash River at Mount Carmel, Ill.	H. 573, 87th Cong.	1,417,000	
Mad River above Huffman Dam, Ohio	H. 439, 87th Cong.	7,930,000	
Big South Fork Cumberland River, Ky. and Tenn.	H. 175, 87th Cong.	151,000,000	
Kentucky River, Ky.	H. 423, 87th Cong.	26,020,000	
Twelvemile Creek, W. Va.	H. 520, 87th Cong.	11,000,000	
Guyandot River, W. Va.	H. 569, 87th Cong.	60,477,000	
Buckhannon River, W. Va.	S. 43, 87th Cong.	1,206,000	
Crab Creek at Youngstown, Ohio	H. 440, 87th Cong.	2,268,000	
Scioto River, Ohio	H. 587, 87th Cong.	55,307,000	
Allegheny River at Salamanca, N.Y.	H. 166, 87th Cong.	1,390,000	
French Creek, Pa.	S. 95, 87th Cong.	23,102,000	
<b>Upper Mississippi River Basin:</b>			
Comprehensive basin plan			31,000,000
Illinois River and tributaries, Illinois, Wisconsin, and Indiana.	H. 472, 87th Cong.	71,465,000	
Rend Lake, Ill.	H. 541, 87th Cong.	35,500,000	
Mississippi River at Guttenberg, Iowa	H. 286, 87th Cong.	729,000	
Mississippi River between Ste. Genevieve and St. Marys, Mo.	H. 519, 87th Cong.	2,500,000	
Harrisonville and Ivy Landing Drainage and Levee District No. 2, Illinois.	H. 542, 87th Cong.	1,112,000	
Columbia Drainage and Levee District 3, Illinois.	H. 543, 87th Cong.	986,000	
Prairie DuPont Levee and Sanitary District, Illinois.	H. 540, 87th Cong.	921,000	
Richland Creek, Ill.	H. 571, 87th Cong.	4,995,000	
Salt River, Joanna Reservoir, Mo.	H. 507, 87th Cong.	63,300,000	
Pecatonica River, Ill. and Wis.	H. 539, 87th Cong.	850,000	
Rock River at Rockford, Ill.	S. 142, 87th Cong.	7,228,000	
Mississippi River urban areas from Hampton, Ill., to mile 300.	H. 564, 87th Cong.	9,289,000	
Mississippi River urban areas from Hampton, Ill., to Cassville, Wis.	H. 450, 87th Cong.	5,350,000	
Kickapoo River, Wis.	H. 557, 87th Cong.	15,570,000	
Warroad River and Bull Dog Creek, Minn.	H. 449, 87th Cong.	972,000	
<b>Great Lakes Basin:</b>			
River Rouge, Mich.	H. 148, 87th Cong.	8,659,000	
Sandusky River, Ohio	S. 136, 87th Cong.	4,300,000	
<b>Gila River Basin:</b>			
Gila River, Ariz., Camelsback Reservoir	S. 127, 87th Cong.	9,770,000	
Gila River below Painted Rock Reservoir, Ariz.	S. 116, 87th Cong.	18,255,000	
Pinal Creek, Ariz.	H. 512, 87th Cong.	1,300,000	
<b>Truckee River Basin:</b> Truckee River and tributaries, California and Nevada.	H. 435, 87th Cong.	2,385,000	
<b>San Francisco Bay area:</b>			
Alameda Creek, Calif.	S. 128, 87th Cong.	14,680,000	
Corte Madera Creek, Marin County, Calif.	H. 545, 87th Cong.	5,534,000	
<b>San Joaquin River Basin:</b>			
New Melones Reservoir, Stanislaus River, Calif.	H. 453, 87th Cong.	113,717,000	
Fresno River, Hidden Reservoir, Calif.	S. 37, 87th Cong.	14,338,000	
Chowchilla River, Buchannon Reservoir, Calif.	S. 98, 87th Cong.	13,585,000	
Mormon Slough, Calvaras River, Calif.	H. 576, 87th Cong.	1,960,000	
<b>Russian River Basin:</b> Russian River, Dry Creek, Calif.	H. 547, 87th Cong.	42,400,000	
<b>Redwood Creek Basin:</b> Redwood Creek, Humboldt County, Calif.	H. 497, 87th Cong.	2,580,000	



*Flood control—Continued*

Project	Document No.	New projects or modification	Increased basin author- izations
Los Angeles River Basin: Comprehensive basin plan.	-----	-----	\$38,000,000
Rogue River Basin: Rogue River.-----	H. 566, 87th Cong.-----	\$106,700,000	-----
Columbia River Basin: Comprehensive basin plan.	-----	-----	226,000,000
Columbia River and tributaries, Washington, Oregon, Idaho, Montana, Wyoming, and Utah.	H. 403, 87th Cong.-----	-----	-----
Burns Creek Dam and Reservoir, Snake River, Idaho.	S. 130, 87th Cong.-----	52,000,000	-----
Ririe Dam and Reservoir, Willow Creek, Idaho.	H. 562, 87th Cong.-----	7,027,000	-----
Blackfoot Dam and Reservoir, Blackfoot River,	H. 568, 87th Cong.-----	829,000	-----
Wynoochee River Basin: Wynoochee River.-----	H. —, 87th Cong.-----	40,211,000	-----
Cook Inlet, Alaska: Bradley Lake, Cook Inlet, Alaska.	H. 455, 87th Cong.-----	45,750,000	-----
Crater-Long Lakes, Alaska: Snettisham project, Alaska.	H. 40, 87th Cong.-----	41,634,000	-----
Total flood control (106 projects).-----	-----	2,199,492,500	804,000,000

## FLOOD CONTROL PROJECTS

## WAREHAM-MARION, MASS.

(H. Doc. 548, 87th Cong.)

*Location.*—The towns of Wareham and Marion, Mass., are located in Plymouth County about 45 miles south of Boston and 35 miles east of Providence, R.I. They are situated at the upper end of Buzzards Bay, 20 to 25 miles northeast of the entrance to the bay from the Atlantic Ocean.

*Authority.*—Public Law 71, 84th Congress, 1st session, approved June 15, 1955.

*Existing project.*—There are no existing or authorized Federal hurricane protection projects or local flood protection works in the area. Federal navigation projects provide a 15-foot-deep channel from Cape Cod Canal into Onset Bay, and a partially completed 9-foot channel from Buzzards Bay into Wareham.

*Problem.*—A serious problem of hurricane tidal flooding exists in the towns of Wareham and Marion. The acuteness of the problem is indicated by the fact that three severe hurricanes have struck the two towns within the past 23 years and upon their recurrence would cause total flood damages of over \$25 million to shore properties. In addition, a recurrence of these hurricanes would cause considerable storm damage to pleasure boat fleets presently based in the area.

*Recommended plan of improvement.*—Construction of a system of rock-protected, earthfill barriers and supplemental dikes and walls consisting of a barrier 1,050 feet long across the Weweantic River about 1,300 feet above its mouth, including a 55-foot ungated navigation opening with a sill elevation at 11 feet below mean sea level, a dike extension on the west 900 feet long to high ground in Marion, a dike extension on the east about 1,300 feet long across Cromeset Neck to Nobska Point, and a dike about 4,800 feet long along an existing



powerline north of U.S. Highway No. 6 in the town of Marion to prevent flanking of the Weweantic barrier; a barrier about 4,150 feet long across the Wareham River from Nobska Point, including a 100-foot ungated navigation opening with a sill elevation at 15 feet below mean sea level, and a dike extension from the east end of the barrier in the vicinity of Long Beach about 1,300 feet to high ground; a barrier about 2,800 feet long across Onset Bay between Burgess Point and Sias Point, including a partially gated 100-foot navigation opening with a sill elevation at 17 feet below mean sea level, a dike extension about 1,000 feet long to the west to high ground at Burgess Point, a dike extension about 1,800 feet long eastward to high ground at Sias Point, and a dike about 900 feet long on the south side of Great Neck Road 1.5 miles west of Burgess Point; and a wall 120 feet long and dikes totaling 3,250 feet for protection of the main business center of Wareham.

*Estimated cost (price level of 1961).—*

Federal.....	\$3, 811, 500
Non-Federal.....	1, 633, 500
Total.....	5, 445, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$113, 000	\$61, 000	\$174, 000
Maintenance and operation.....		13, 000	13, 000
Maintenance of navigation aids.....	1, 000		1, 000
Major replacements.....		2, 000	2, 000
Estimated tax losses.....		2, 000	2, 000
Total.....	114, 000	78, 000	192, 000
Annual benefits:			
Prevention of tidal-flood damages.....			458, 000
Elimination of emergency costs.....			9, 000
Prevention of damage to boats.....			290, 000
Total.....			757, 000

*Benefit-cost ratio.—3.9.*

*Local cooperation.—*Provide all lands, easements, and rights-of-way, including borrow areas and spoil disposal areas necessary for the construction of the project, at costs presently estimated at \$100,000; accomplish all changes, alterations, and additions to, or relocations of, any buildings and utilities made necessary by the construction of the project, at costs presently estimated at \$15,000; bear 30 percent of the total first cost of construction, a sum presently estimated at \$1,633,500, to consist of the items listed above and a cash contribution presently estimated at \$1,518,500, to be paid either in a lump sum prior to initiation of construction or in installments prior to start of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, the final apportionment of costs to be made after actual costs and values have been determined; hold and save the United States free from damages due to the construction works; maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; and at least annually notify those affected that the project

will not provide complete protection from tidal flooding and that further local actions must be taken during hurricane emergencies. Local interests are willing to furnish the items of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Commerce: Favorable.

Commonwealth of Massachusetts: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The towns are principally residential and summer vacation centers. Records indicate that of the 69 known hurricanes affecting or threatening the area since 1935, 35 have caused moderate to severe tidal flooding. A recurrence of the most destructive, which occurred in 1938, would cause tidal-flood damages estimated at \$13,800,000 in the two towns, of which about \$10,800,000 would be in Wareham. Costs have been allocated to local interests in accordance with the formula for hurricane-flood cost sharing, 70 percent Federal and 30 percent local. The project is amply justified.

#### POINT JUDITH, R.I.

(H. Doc. 521, 87th Cong.)

*Location.*—Point Judith is located on the Atlantic shore of Rhode Island about 40 miles south of Providence, R.I.

*Authority.*—Public Works Committee of the U.S. Senate resolution adopted July 1, 1949.

*Existing project.*—There are no Federal improvements for hurricane-tidal protection in the area. The existing Federal navigation improvement provides for a 770-acre harbor of refuge, an entrance channel and east and west channels, all 15 feet deep, a 5-acre anchorage 10 feet deep, and a channel and 5-acre anchorage basin 6 feet deep. There are also beach erosion control works at Sand Hill Cove State Beach and East Matunuck State Beach.

*Problems.*—Local interests desire improvement of the existing navigation improvement, dredged spoil to be used to build up the beaches, and protection from hurricanes by dikes, floodwalls, dune restoration, or combination thereof.

*Recommended plan of improvement.*—Construction of hurricane-tidal protection between Matunuck and Point Judith, consisting of rock-faced dikes, revetment, dunes, bulkheads, high beach berms, and abutments and rock dikes at the breachway; modification of the navigation project to include (1) straightening and deepening entrance channel to 20 feet; (2) enlarging 10-foot deep anchorage to 16 acres; (3) dredging a channel 150 feet wide and 10 feet deep along the State finger piers at Galilee to an 8-acre anchorage, 8 feet deep; (4) dredging a channel and 5-acre anchorage south of Snug Harbor; (5) deepening the Wakefield channel to 8 feet; and (6) dredging an additional 7-acre anchorage at Wakefield; and in lieu of the presently authorized beach erosion project at East Matunuck State Beach, widen 3,830 feet of beach generally to 150-foot width by direct placement of suitable sand fill, construction of groins, and installation of sand fences.



*Estimated cost (1961 price level).—*

Federal.....	\$2, 414, 000
Non-Federal.....	1, 151, 000
Total.....	3, 565, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$89, 100	\$49, 100	\$138, 200
Maintenance, operation, and replacement.....	14, 200	66, 400	80, 600
Maintenance of navigation aids.....	600		600
Total.....	103, 900	115, 500	219, 400
Annual benefits:			
Hurricane protection.....			231, 800
Navigation.....			73, 300
Beach erosion protection.....			218, 700
Total.....			523, 800

*Benefit-cost ratio.—2.4.*

*Local cooperation.*—Provide without cost to the United States all lands, easements, rights-of-way, and spoil disposal, pondage, and borrow areas necessary for construction of the project and for subsequent maintenance of the navigation features, when and as required; accomplish without cost to the United States all alterations and relocations of sewage and drainage facilities, buildings, utilities, highways, and other structures made necessary by the construction; bear 32 percent of the total first cost, a sum presently estimated at \$1,151,000, to consist of the items listed above and a cash contribution now estimated at \$701,000 to be paid either in a lump sum prior to initiation of construction or in installments prior to commencement of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, the final apportionment of cost to be made after actual costs and values have been determined; hold and save the United States free from damages due to construction of the project and subsequent maintenance of the navigation features; maintain and operate all the works after completion, except the navigation channels, anchorage area, and aids to navigation, in accordance with regulations prescribed by the Secretary of the Army; assure continued public ownership of the shore upon which **Federal participation in beach erosion** control is based and its administration for public use during the economic life of the project; control water pollution to the extent necessary to safeguard the health of bathers; provide and maintain without cost to the United States necessary mooring facilities and utilities, including additional public landings at Snug Harbor and Wakefield, with suitable supply facilities open to all on equal terms; construct and maintain any bulkheads required for retention of dredged material discharged to spoil disposal areas from the initial construction and subsequent maintenance of navigation features; provide suitable facilities at East Matunuck State Beach to support the recreational development of the beach; and at least annually inform the public and those affected that the improvement will not provide any substantial pro-



tection from ocean surges higher in elevation than that which occurred in September 1938. Local interests have indicated willingness to furnish local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

State of Rhode Island: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee notes that the proposed improvements provide for hurricane protection, navigation and beach erosion protection. It notes also that the cost sharing is based on the existing policy for each purpose in accordance with the benefits accruing to that purpose.

#### NARRAGANSETT PIER, RHODE ISLAND

(H. Doc. No. 195, 87th Cong.)

*Location.*—On the Atlantic coast near the mouth of the West Passage into Narragansett Bay, about 30 miles south of Providence, R.I.

*Authority.*—Public Law 71, 84th Congress, 1st session, approved June 15, 1955.

*Existing project.*—No Federal hurricane, flood control, or navigation projects are in the area. An authorized beach erosion project provides for widening about 1 mile of beach, construction of seven rock groins, and construction of a sand barrier on Little Neck Point.

*Problems.*—Hurricanes have caused severe tidal flooding; erosion of the beach is reducing the usable area; and there is a need for an improved small boat harbor.

*Recommended plan of improvement.*—Provides for improvements in the interest of hurricane flood protection, beach erosion control, and navigation consisting of: A sand berm of about 3,000 feet long; concrete walls about 4,500 feet long and 270 feet long; four groins; a rock revetment; a land dike about 1,120 feet long with a culvert and sluice gate on Little Neck Pond; a sand barrier; a mooring basin in Narrows River of 15 acres 8 feet deep with an entrance channel 8 feet deep and 100 feet wide; and a rock jetty about 930 feet long.

*Estimated cost (1959 price level).*—

Federal .....	\$1, 152, 000
Non-Federal .....	704, 000
Total .....	1, 856, 000

#### *Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization .....	\$42, 700	\$30, 600	\$73, 300
Maintenance and operation .....	4, 700	14, 100	18, 800
Total .....	47, 400	44, 700	92, 100
Annual benefits:			
Flood damages prevented .....			62, 500
Small-boat harbor .....			39, 400
Beach protection .....			22, 000
Total .....			123, 900

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Provide all lands, easements, and rights-of-way; accomplish all alterations; bear 38 percent of the total first cost presently estimated to be \$704,000 which includes a cash contribution of \$564,000; hold and save the United States free from damages due to construction and maintenance; maintain and operate all work except the navigation project; assure public use of the beach improvement; prevent water pollution; prevent encroachment; provide and maintain suitable public landings; and construct and maintain retention walls for dredged material. Local interests have indicated willingness to cooperate in the desired improvements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of HEW: Favorable.

State of Rhode Island: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The proposed improvements provide for hurricane protection, small-boat navigation, and beach erosion protection. The committee notes that the combination of three primary features in one project result in economies to each feature. Local participation in the cost of the plan was computed on the basis of the normal requirement for each purpose, 30 percent for hurricane flood control, two-thirds for beach protection on public lands, and 50 percent for recreational navigation.

NEW LONDON, CONN.

(H. Doc. 478, 87th Cong.)

*Location.*—On the west side of the Thames River estuary and the northeast shore of Long Island Sound, about 50 miles east of New Haven, Conn.

*Authority.*—Public Law 71, 84th Congress, 1st session.

*Existing project.*—There are no existing or authorized hurricane protection projects in the area. A low, rockfill, offshore barrier constructed by local interests south of Bentleys Creek provides a limited degree of wave protection for an industrial area. Completed Federal navigation projects provide a 33-foot-deep channel extending 3.8 miles from Long Island Sound to State pier, a 23-foot-deep channel about 6,000 feet long skirting the New London waterfront, and a depth of 15 feet in Shaw Cove.

*Flood problem.*—New London has experienced heavy tidal-flood losses from past hurricanes and other great storms. Recurrence of hurricanes of the magnitude of the 1938, 1944, and 1954 storms would cause losses ranging from \$250,000 for the 1944 hurricane to \$5,500,000 for the 1938 hurricane.

*Recommended plan of improvement.*—Consists of a section of barrier and walls extending about 3,260 feet from the vicinity of the ferry deck on Pequot Avenue, across Powder Island to Fort Trumbull, with a 30-foot gated navigation opening for the Bentleys Creek Channel; a concrete land wall at Smith Street west of Fort Trumbull; and a 1,760-foot barrier and wall system across the mouth of Shaw Cove with a 46-foot gated navigation opening and a pumping station to dispose of interior drainage.

*Estimated cost (price level of 1961).—*

Federal.....	\$2, 401, 000
Non-Federal.....	1, 029, 000
Total.....	3, 430, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$91, 000	\$45, 000	\$136, 000
Maintenance, operation, and replacement.....	1, 000	26, 000	27, 000
Loss of land productivity.....		3, 000	3, 000
Total.....	92, 000	74, 000	166, 000
Annual benefits:			
Damages prevented.....			244, 400
Increased land use.....			5, 900
Total.....			250, 300

*Benefit-cost ratio.—1.5.*

*Local cooperation.*—(a) Provide without cost to the United States all lands, easements, and rights-of-way including borrow areas and spoil disposal areas necessary for the construction of the project, at costs presently estimated at \$180,000; (b) accomplish without cost to the United States all modifications or relocations of existing sewerage and draining facilities, buildings, utilities, and highways made necessary by the construction of the project, at costs presently estimated at \$30,000; (c) bear 30 percent of the total first cost of construction, a sum presently estimated at \$1,029,000 to consist of items listed in subparagraphs (a) and (b) above and a cash contribution, now estimated at \$619,000, to be paid either in a lump sum prior to initiation of construction, or in installments prior to commencement of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, the final apportionment of cost to be made after actual costs and values have been determined; (d) hold and save the United States free from damages due to the construction works; and (e) maintain and operate all works after completion in accordance with regulations prescribed by the Secretary of the Army. Local interests have indicated their willingness to furnish the items of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior : Favorable.

Department of Commerce : Favorable.

Department of Health, Education, and Welfare : Favorable.

State of Connecticut : Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.*—The committee notes that the improvements are economically justified and that the proposed works are adequate to protect against tidal flood from the most severe hurricane considered reasonably characteristic of the area. Cost sharing is in accordance with the established policy.



## WESTPORT, CONN.

(H. Doc. 412, 87th Cong.)

*Location.*—On the north shore of Long Island Sound about 40 miles northeast of New York City.

*Authority.*—In partial response to Public Law 71, 84th Congress, 1st session, approved June 15, 1955.

*Existing project.*—There are no existing hurricane flood protection projects in the area.

*Flood problem.*—Three severe hurricanes and several other great storms have struck the area within the past 22 years.

*Recommended plan of improvement.*—Provides for construction of an earthen dike with rock paving on its top and seaward slope, where necessary, together with necessary gated culverts for interior drainage, starting at high ground north of the intersection for Compo Road South and Compo Beach Road and extending southerly along Grays Creek about 2,250 feet to the vicinity of Agawam Avenue; thence eastward along the seaward side of Compo Beach Road 1,460 feet to Soundview Drive; and thence northeasterly along the seaward side of Soundview Drive about 1,510 feet to high ground at Hills Point Road.

*Estimated cost (1960 price level).*—

Federal.....	\$217, 000
Non-Federal.....	93, 000
Total.....	310, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$8, 300	\$4, 900	\$13, 200
Maintenance and operation.....		3, 000	3, 000
Total.....	8, 300	7, 900	16, 200
Annual benefits: Damages prevented.....			39, 300

*Benefit-cost ratio.*—2.4.

*Local cooperation.*—(a) Provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project, at costs presently estimated at \$50,000; (b) accomplish without cost to the United States all relocations and alterations of buildings and utilities made necessary by the work, at costs presently estimated at \$3,000; (c) bear 30 percent of the total first cost of the project, a sum presently estimated at \$93,000, to consist of the items listed in subparagraphs (a) and (b) above and a cash contribution now estimated at \$40,000, to be paid either in a lump sum prior to initiation of construction, or in installments prior to commencement of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, the final apportionment of cost to be made after actual costs and values have been determined; (d) hold and save the United States free from damages due to the construction works; (e) maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of

the Army; and (f) at least annually notify those affected that the project will not provide protection from surges in Long Island Sound higher in elevation than that experienced during the 1938 hurricane. They have indicated willingness to meet the items of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

State of Connecticut: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The town of Westport has a population of about 21,000. There are about 20 manufacturing plants in Westport which employ about 400 people. This area is largely a residential suburb of nearby metropolitan areas. The committee notes that local interests desire tidal flood protection; however, for esthetic reasons, they desire protection to a level no higher than the maximum flood of record of 1938. The recommended improvement is amply justified.

#### MYSTIC, CONN.

(H. Doc. 411, 87th Cong.)

*Location.*—Mystic is located in southeastern Connecticut, on both banks of the lower Mystic River which empties into Long Island Sound.

*Authority.*—Public Law 71, 84th Congress, approved June 15, 1955.

*Existing project.*—There is no existing Federal project for hurricane protection at Mystic. The existing Federal navigation project provides for a channel 12 to 15 feet deep, extending 3.75 miles upstream from the mouth, and an anchorage and turning basin 9 feet deep. Local interests have constructed wharves, docks, and repair and service facilities.

*Flood problem.*—Three severe hurricanes have struck Mystic since the beginning of 1938 causing damages of serious proportion. At 1960 price levels total flood damages of about \$6 million would result from a recurrence of these three hurricanes and two other severe storms which occurred during this period.

*Recommended plan of improvement.*—Provide for two earth fill barriers protected by armor stone and riprap with crests 16.5 feet above mean sea level, one about 3,200 feet long across the harbor in the vicinity of Sixpenny Island with a 75-foot navigation opening, and one about 1,950 feet long across the inlet east of Mason Island with a 12-foot small boat opening at the causeway bridge, together with necessary gates and stoplogs; a land dike about 450 feet long, with crest elevation 16.5 feet above mean sea level, on the west side of Mason Island with a gated drainage structure; and two land dikes with crests 15.5 feet above mean sea level, having a total length of about 2,200 feet on the mainland northeast of Mason Island, together with necessary appurtenances.

*Estimated cost (price level of 1960).*—

Federal	\$1, 490, 000
Non-Federal	638, 000
Total	2, 128, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$57,000	\$27,400	\$84,400
Maintenance and operation.....	1,000	14,800	15,800
Estimated tax loss.....		200	200
Total.....	58,000	42,400	100,400
Annual benefits:			
Damages prevented.....			165,000
Elimination of emergency cost.....			10,000
Total.....			175,000

*Benefit-cost ratio.*—1.7.

*Local cooperation.*—(a) Provide all lands, easements, and rights-of-way necessary for construction of the project; (b) accomplish all relocations and alterations of sewerage and drainage facilities, buildings, utilities, highways, and other structures made necessary by the construction; (c) bear 30 percent of the total first cost, a sum presently estimated at \$638,000, to consist of the items listed in (a) and (b) above and a cash contribution now estimated at \$549,000, to be paid either in a lump sum prior to initiation of construction, or in installments prior to commencement of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, the final apportionment of cost to be made after actual costs and values have been determined; (d) hold and save the United States free from damages due to construction of the project; and (e) maintain and operate all the works after completion, except aids to navigation, in accordance with regulations prescribed by the Secretary of the Army. Local interests are willing to furnish the items of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

State of Connecticut: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—A recurrence of the maximum flood of record, which occurred in 1938, would cause damages estimated at \$3,820,000 under 1960 conditions. The committee considers the project well justified, and the cost sharing in accordance with established policy.

## NAUGATUCK RIVER, ANSONIA-DERBY, CONN.

(H. Doc. 437, 87th Cong.)

*Location.*—The city of Ansonia and the town of Derby are adjoining communities located in southern Connecticut on the Naugatuck River about 12 miles above Long Island Sound.

*Authority.*—A resolution of the Public Works Committee of the U.S. Senate adopted September 14, 1955, and similar resolutions of the Public Works Committee of the House of Representatives of the United States adopted June 13, 1956, and June 23, 1956, respectively.

*Existing project.*—Federal flood control improvements in the basin



affecting Ansonia-Derby consist of seven reservoirs, for flood control, authorized by Congress. One reservoir, Thomaston, is located at mile 30 on the main stream and has been in operation for flood control since September 1960. None of the other reservoirs are under construction.

*Flood problem.*—Flooding of the Naugatuck River causes damages to residential, commercial, industrial, and other properties located in Ansonia-Derby and creates health, safety, and economic problems which adversely affect the welfare of the cities.

*Recommended plan of improvement.*—Provides for approximately 12,470 linear feet of levee and floodwall, with appurtenant works, for the protection of approximately 232 acres of industrial, commercial, and residential areas in Ansonia-Derby.

*Estimated cost (price level of January 1960).*—

Federal.....	\$5, 620, 000
Non-Federal.....	380, 000
Total.....	6, 000, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$208, 900	\$15, 200	\$224, 100
Maintenance and operation.....	0	10, 700	10, 700
Net loss of productivity.....	0	2, 300	2, 300
Total.....	208, 900	28, 200	237, 100
Annual benefits:			
Damages prevented.....			206, 000
Enhancement from reduction of flood hazard.....			84, 000
Total.....			290, 000

*Benefit-cost ratio.*—1.2.

*Local cooperation.*—(a) Contribute in cash because of the more costly plan desired by local interests for the River Street area, 1.4 percent of the construction cost, presently estimated at \$80,000, to be paid either in a lump sum prior to start of construction or in installments prior to start of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, the final contribution to be determined after actual costs are known; (b) provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project, including changes to highway bridges and roads, railroad track, sewers, and other utilities; (c) hold and save the United States free from damages due to the construction works; (d) maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; and (e) prevent encroachment on the improved channels or on the ponding areas, and if capacities are impaired, provide equivalently effective storage or pumping capacity without cost to the United States. Local interests are willing to furnish the items of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

State of Connecticut: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.*—The committee was advised that the flood of August 1955 resulted in flood damages in the Ansonia-Derby area of about \$34 million. Recurrence of that flood under present conditions of development and after stage reductions by the authorized upstream reservoir system would result in flood damages of about \$14 million. The local protection recommended for Ansonia-Derby would provide flood protection for those cities and is needed and justified. The requirements of local cooperation, including a cash contribution, are equitable and in accordance with existing policy for local flood protection projects.

RONDOUT CREEK AND WALLKILL RIVER, N.Y. AND N.J.

(S. Doc. 113, 87th Cong.)

*Location.*—Rondout Creek drains 1,197 square miles in southern New York and northern New Jersey and empties into the Hudson River near Kingston, N.Y. Its principal tributary, Wallkill River, drains 786 square miles and enters the main stem just below Lefever Falls, 7.5 miles above the creek mouth.

*Authority.*—The report is in partial response to two resolutions of the Senate Public Works Committee adopted September 14, 1955, and November 14, 1955.

*Existing project.*—Clearing and snagging on Rondout Creek at Rosendale and upstream locations was authorized in April 1956 and completed in April 1957.

*Flood problem.*—Floods affect over 23,800 acres of rural land; of the 250 acres of affected urban area, approximately 200 acres are located in Rosendale and Ellenville. At Rosendale, the flood of October 1955 was the most severe, following by 2 months the previous record flood of August 1955. One drowning occurred along Beer kill. Average annual damages on Roundout Creek are \$247,600; on Sandburg Creek, \$267,400; and on Wallkill River and tributaries, \$367,300.

*Recommended plan of improvement.*—The only localities for which protective works are economically justified at this time are Rosendale and Ellenville. At Rosendale improvements would be made on Rondout Creek primarily by channel excavation, floodwall and levee construction, ponding areas, a pump station, utility and road changes, and drainage structures. At Ellenville improvements would be made on Beer kill and Fantine kill by the construction of floodwalls, levees, and channel improvements with appurtenant ponding areas, drainage structures, utility changes, and bridge replacements and alterations; and improvement of North Gully, by a concrete chute, bridge reconstruction, upstream debris dam, utility changes, and drainage structures.

*Estimated cost (price level of June 1960).—*

Federal.....	\$5, 111, 000
Non-Federal .....	836, 100
Total.....	5, 947, 100

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$193, 700	\$30, 200	\$223, 900
Maintenance and operation.....	0	24, 500	24, 500
Major replacements.....	0	5, 100	5, 100
Total.....	193, 700	59, 800	253, 500
Annual benefits: Damages prevented.....			311, 800

*Benefit-cost ratio.—1.2.*

*Local cooperation.*—Furnish without cost to the United States all lands, easements, and rights-of-way necessary for construction of the improvements; hold and save the United States free from damages due to the construction works; perform without cost to the United States all alterations of highways, highway bridges, utility and related facilities made necessary for construction of the project; protect the channels, ponding areas, and other flood-control works from future encroachment or obstruction that would reduce their flood-carrying capacity and control development of the fringe areas not protected by the proposed improvement with a view to preventing an undue increase in the flood-damage potential; and maintain and operate each usable element of the work after completion of the element and of all the works after completion thereof in accordance with regulations prescribed by the Secretary of the Army. Local interests have indicated their willingness to cooperate in them.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

Department of Commerce: Favorable.

State of New York: Favorable.

State of New Jersey: Favorable.

*Comments of the Bureau of the Budget.—*No objections.

*Remarks.*—The committee was advised that flood damages for a recurrence of the October 1955 flood under present conditions would be in excess of \$3.8 million at Ellenville and \$1.5 million at Rosendale. The committee notes that the recommended improvements consisting of local flood protection projects at Rosendale and Ellenville, N.Y., is needed and amply justified. The local cooperation is equitable and in accordance with existing policy for local flood protection projects.



## RARITAN BAY AND SANDY HOOK BAY, N.J.

(H. Doc. 464, 87th Cong.)

*Location.*—Twenty-one mile length of shores of Raritan and Sandy Hook Bays between South Amboy and Highlands. The western end is about 30 miles southwest of midtown New York City.

*Authority.*—Section 2 of River and Harbor Act of July 3, 1930, pertaining to cooperative beach erosion control investigations; and Public Law 71, 84th Congress, 1st session, June 15, 1955, pertaining to hurricane investigations of the eastern and southern seaboard.

*Existing project.*—None for hurricane or beach protection. Federal Government through the Works Progress Administration participated in constructing some protective works. Under authorized navigation projects jetties at Cheesequake Creek were built in 1882–83 at a cost of \$40,000, and the breakwater off Atlantic Highlands was completed in 1940 at a cost of \$562,726, of which local interests contributed \$53,790. Since 1929 considerable protective work has been accomplished by local interests at a cost of about \$1 million.

*Problem.*—There is a need for protection of shore areas from erosion by wave attack and from inundation from storm tides.

*Recommended plan of improvement.*—Provides for (a) construction of 8,800 feet of beach fill and 1,940 feet of tieback levee with necessary interior drainage facilities and road crossings in Madison Township; (b) construction of 4,800 feet of beach fill in Matawan Township; (c) 3,000 feet of beach fill at Union Beach; and (d) construction of 14,150 feet of beach fill, 13,290 feet of tieback levee, and 3 rock groins to be provided when required, together with interior drainage facilities and road crossings at Keansburg, and East Keansburg. Provides for reimbursement to local interests of \$57,000 as the Federal share of the costs incurred by them in accomplishing the beach protection work at Keansburg in 1957.

*Estimated cost (price level May 1960).*—

Federal.....	\$3, 097, 000
Non-Federal.....	1, 651, 000
Total.....	4, 748, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$111, 400	\$60, 000	\$171, 400
Maintenance and operation.....		72, 800	72, 800
Total.....	111, 400	132, 800	244, 200
Annual benefits:			
Hurricane protection.....			360, 500
Shore protection.....			178, 300
Total.....			538, 800

*Benefit-cost ratio.—2.2.*

*Local cooperation.*—Provide without cost to the United States all lands, easements and rights-of-way, including borrow areas necessary for construction of the project; accomplish without cost to the United States all alterations and relocations of buildings, streets, storm drains, utilities and other structures made necessary by the construction; bear 35.2 percent of the total first cost consisting of the items stated above and a cash contribution to be paid either in a lump sum prior to initiation of construction or in installments prior to commencement of construction of pertinent items, in accordance with construction schedules as required by the Chief of Engineers, the final apportionment of cost to be made after actual costs and values have been determined; hold and save the United States free from damages due to the construction works; maintain all the works after completion in accordance with regulations prescribed by the Secretary of the Army; maintain during the economic life of the project continual public ownership of the non-Federal publicly owned shores and continual availability for public use of privately owned shore equivalent to that upon which the recommended Federal participation is based; control water pollution to the extent necessary to safeguard the health of bathers; obtain approval of the Chief of Engineers of detailed plans and specifications for the work contemplated and arrangements for its prosecution, prior to commencement of any work on the recommended beach-protection phase of the project at Matawan Township and Borough of Union Beach or the beach protection phase of the project at Madison Township for which Federal participation is planned, if undertaken separately from the recommended combined improvement; construct, concurrently with the recommended beach fill, suitable parking fields and bathhouses open to all on equal terms; and at least annually inform interests affected that the hurricane improvements will not provide substantial protection from bay surges higher in elevation than that of hurricane "Donna," September 12, 1960. Local interests have indicated willingness to comply with the requirements of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of New Jersey: Favorable.

*Comments of the Bureau of the Budget.—No objection.*

*Remarks.*—The committee notes that continuing erosion of the protective and recreational beaches has exposed public and private property to damage and reduced the width of beaches to the extent that their recreational use is seriously impaired. In addition, it notes that the shore is subject to serious flooding resulting from hurricane-induced tides. The committee notes that a combined hurricane flood protection and beach erosion control plan is urgently needed and is amply justified. The cost sharing for each purpose is in accordance with existing policy for projects of this nature.



## LACKAWANNA RIVER, PA.

(S. Doc. 141, 87th Cong.)

*Location.*—The Lackawanna River drains 346 square miles, mostly in Lackawanna County, northeastern Pennsylvania. The valley has a total length of 44 miles and mountains rise to 1,200 feet above the alluvial flood plain.

*Authority.*—Senate Committee on Public Works resolution adopted September 14, 1955.

*Existing project.*—The Corps of Engineers is constructing Stillwater Reservoir, above Forest City, and has performed channel clearing and emergency restoration and rehabilitation at several localities. The Commonwealth of Pennsylvania improved the channels of Lackawanna River and several of its tributaries at numerous locations and has planned other improvements.

*Flood problems.*—The 2,900 acres of valley area is subject to frequent and severe flooding. More than 50 percent of the flooded area is urban. The 1942 flood was the largest of record at Scranton and caused over \$5 million damage in the basin. The 1955 flood was very large on the tributary streams and caused \$13 million on the tributaries and \$2.9 million along the river. With Stillwater Reservoir, average annual damages along the river are estimated at \$791,000.

*Recommended plan of improvement.*—Construction of Fall Brook and Ayleworth Creek Reservoirs for flood control and the local-protection works on Lackawanna River, at Scranton, consisting of channel improvement, levees, walls, pump stations, and other related work.

*Estimated cost (January 1959 price level).*—

Federal.....	\$3, 596, 000
Non-Federal.....	1, 591, 000
Total.....	5, 187, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$132, 500	\$144, 000	\$276, 500
Maintenance and operation.....	12, 000	25, 300	37, 300
Loss of productivity.....		11, 400	11, 400
Total.....	144, 500	180, 700	325, 200
Annual benefits: Flood damages prevented.....			557, 000

*Benefit-cost ratio.*—1.7 for the overall plan.

*Local cooperation.*—Channel improvements: (a) Provide all lands, easements, and rights-of-way; (b) provide all necessary alterations of utilities; (c) hold and save the United States free from damage; (d) maintain and operate the completed works; and (e) protect the channels from future encroachments.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Commerce: Favorable.

State of Pennsylvania: Favorable.



*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee notes that the proposed construction of Fall Brook and Ayleworth Creek Reservoirs for flood control and the local protection works at Scranton are amply justified by the prevention of flood damages.

#### JUNIATA RIVER AND TRIBUTARIES, PENNSYLVANIA

(H. Doc. 565, 87th Cong.)

*Location.*—Juniata River is located in south-central Pennsylvania, and is formed by the junction of the Frankstown Branch and Little Juniata River. Meandering 102 miles easterly, the Juniata River joins the Susquehanna River about 84 miles above Chesapeake Bay. Raystown Branch is the largest tributary of the Juniata River.

*Authority.*—This report is in full response to authority provided in section 11 of the Flood Control Act approved December 22, 1944, and in section 204 of the Flood Control Act approved September 3, 1954.

*Existing project.*—The only Federal flood control project in the Juniata River Basin is one for local protection at Tyrone, Pa., authorized by the Flood Control Act approved December 22, 1944. It provides for the construction of a levee, floodwalls, improved channels, pressure conduits, and pertinent works, at an estimated cost to the United States, revised in 1960, of \$9,400,000. Local cooperation has not been furnished and no work has been performed.

*Flood problem.*—The area subject to floods by the Juniata River extends throughout the entire length of the basin and is both urban and rural. Towns and villages affected are Williamsburg, Tyrone, Huntingdon, Smithfield Township, Bedford, Everett, Mount Union, Lewiston, Mifflin, and Newport. In the basin are farms and residences, business and commercial establishments, public utilities, railroads, and highways, all of which are subject to floods. The greatest losses were caused by the March 1936 flood. Floods have caused damages in excess of \$14 million from 1936 to the present based on damage estimates made after each flood and on prices then current.

*Recommended plan of improvement.*—The most suitable plan of improvement to serve the water resource needs of the basin would consist of a multiple-purpose reservoir on the Raystown Branch to provide for flood control, hydroelectric power, recreation, fish and wildlife, and low-flow augmentation for water quality improvement. The recommended plan consists of a dam of earthfill construction with a maximum height of 225 feet above the stream bed and a length of about 1,770 feet; a spillway controlled by gates, located in a saddle of a ridge near the damsite; a powerhouse located downstream from the dam; three tunnels through the ridge to supply the turbines; a reregulating dam, located at river mile 0.5, provided to reduce fluctuation of discharges from the peaking power operation; preservation of the sites against incompatible development; and provided that installation of the power generating facilities shall not be made until the Chief of Engineers shall submit a reexamination report to the Secretary of the Army for approval of the President.

*Estimated cost (price level of 1960).—*

Federal.....	<sup>1</sup> \$77, 361, 000
Non-Federal.....	0
Total.....	<sup>1</sup> 77, 361, 000

<sup>1</sup> \$32,150,000 without provision for power—see remarks.*Project economics.—*

Annual charges:	<i>All Federal</i>
Interest and amortization.....	\$3, 008, 000
Economic cost of land.....	62, 000
Operation, maintenance, and replacement.....	600, 000
Taxes foregone.....	1, 100, 000
Total.....	4, 770, 000

Annual benefits:	
Power.....	4, 189, 000
Recreation.....	1, 104, 000
Flood control.....	576, 000
Fishery.....	84, 000
Water quality.....	70, 000
Total.....	6, 023, 000

*Benefit-cost ratio.—1.3.**Local cooperation.—None.**Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Public Health Service: Favorable.

Federal Power Commission: Favorable.

Commonwealth of Pennsylvania: Favorable.

*Comments of the Bureau of the Budget.*—Advises that there would be no objection to submission of the report to Congress, subject to consideration of the following: That it would be preferable for authorization of the power-generating facilities to await completion and consideration by Congress of the reexamination report proposed by the Chief of Engineers, under normal preauthorization procedures; that if power-generating facilities should be conditionally authorized at this time, the reexamination report to be prepared for submission to the Secretary of the Army and approval by the President should take full cognizance of the plans of the investor-owned public utilities in the area, and contain information in sufficient detail to demonstrate that inclusion of hydroelectric power facilities in the project is financially feasible in the light of pertinent reimbursement and repayment policies in effect at the time; that the Congress should be furnished with more detailed data relative to a project without power but with provisions for future installation at the time the project is being considered for authorization; and that the Secretary of the Army may wish to consider deferring submission of the report to Congress pending completion of the comprehensive survey of the Susquehanna River now being undertaken by the Corps of Engineers.

*Remarks.*—The committee notes that flood control improvements are urgently needed in the Juniata River Basin and that the recommended multiple-purpose dam and reservoir on the Raystown Branch



will substantially reduce flood heights along the Juniata River below the dam and along the lower Susquehanna River. In addition, it notes that the reservoir created by the dam will meet a substantial portion of the growing demand in the area for public outdoor water-associated recreation. In view of the considerable opposition to inclusion of power as a feature of the Raystown project, the committee recommended the project with power features be eliminated with the exception of those provided for in section 203. It notes that a project without power will fully serve the remaining purposes and is economically justified. The committee recommends that if the Chief of Engineers deems it desirable, he may submit a reexamination report on the power-generating features to the Congress for its consideration. The Federal cost of a project with the power features eliminated is \$32,150,000.

DELAWARE RIVER BASIN, N.Y., N.J., PA., AND DEL.

(H. Doc. 522, 87th Cong.)

*Location.*—The Delaware River drains a relatively long narrow area in the northeastern United States. The area extends approximately 265 miles southward from the western slopes of the Catskill Mountains in New York to the Atlantic Ocean at the mouth of Delaware Bay between Cape May in New Jersey and Cape Henlopen in Delaware. The basin boundary encompasses 2,362 square miles in southeastern New York, 6,422 square miles in eastern Pennsylvania, 2,969 square miles in western New Jersey, 1,004 square miles in Delaware, 8 square miles in the northeastern corner of Maryland, and 782 square miles of water surface in Delaware Bay.

*Authority.*—Resolution, Senate Committee on Public Works, adopted September 14, 1955, and other resolutions.

*Existing project.*—Federal improvements by the Corps of Engineers consist of the Prompton and Edgar Jadwin Reservoirs in the Lackawaxen River Basin, the Bear Creek Reservoir on Lehigh River, and local protection works at Allentown and Bethlehem, Pa. SCS programs are underway on 4 watersheds and planned for 16 other watersheds. Authorized Federal navigation projects for the Delaware River provide for a channel 40 feet deep from the sea for 126.3 miles to Newbold Island, thence 35 feet deep for about 5½ miles to Trenton, thence 12 feet deep for about 1¼ miles to the head of navigation. Appurtenant facilities and numerous tributary channels on both sides of Delaware River and Bay also are provided under the existing project.

*Flood problems.*—Major floods in the Delaware River Basin are usually associated with severe storms resulting in widespread heavy precipitation and often accompany hurricanes. The area of major flood damages along the main stem of the Delaware River lies along the 95-mile reach from Delaware Water Gap, Pa., to Burlington, N.J.



Damage centers at Honesdale and Hawley in the Lackawaxen Basin are now afforded protection by reservoirs and local protection works. In the Lehigh River Basin the Bear Creek Reservoir and local protection works provide protection for damage centers at Weissport, Allentown, and Bethlehem but areas elsewhere in the basin are subject to recurring flood damages. In the Schuylkill Basin major floods occur along the 75 miles of the main stem of the Schuylkill River.

*Recommended plan of improvement.*—The plan of improvements consists of 11 major control projects to be constructed prior to the year 2010; 8 major control projects to be developed for recreation prior to 2010, with water supply to be added subsequently; and 39 small control projects to be developed under continuing authorizations, subject to the desires of local interests. Of the 11 major control projects to be constructed prior to 2010, all would provide for water supply and recreation, 8 would provide for flood control storage, and 2 for generation of hydroelectric power. Recreation potentials at the 11 major projects proposed for early development were appraised both for that directly related to the basic water control project and for that indirectly related to the basic water control project and its directly related recreation potentials. Cost allocations were based on the basic project without consideration of the indirect values except in the case of the Tocks Island project where it was found that the widespread regional and national significance of the recreation opportunities warranted the apportionment of all specific and allocated recreation costs to Federal costs. Also, it was found that at the Tocks Island project the development of pumped storage hydroelectric facilities would probably be feasible as either a Federal or non-Federal venture. However, because of difficulties in firmly assessing production costs and power values, authority for construction of the pumped storage features was not recommended. The recommended plan would reduce average annual flood damages about 43 percent along the principal waterways and about 33 percent in the upstream areas. The plan, also, would meet streamflow requirements for the basin to year 2010, including authorized diversions.

*First costs and annual operation, maintenance, and replacement.*—The first cost of the long-range plan of development of the water resources of the Delaware River Basin consisting of a 58-reservoir system, is estimated at \$591 million of which the initial and ultimate Federal costs are estimated at \$232 million and \$143 million, respectively. The plan of development provides for Federal construction of six reservoirs and modification of two authorized projects, which are included in the comprehensive plan, at initial and ultimate Federal costs estimated at \$224 million, and \$135 million, respectively. The following table lists the projects in the comprehensive plan, together with estimated Federal and non-Federal costs of construction and annual maintenance.

*Comprehensive plan of development, Delaware River Basin*

## MAJOR CONTROL PROJECTS

[Costs in thousands of dollars. Totals may not agree with sums due to rounding]

Project	Purpose	Costs					
		Construction			Annual operations, maintenance, and replacements		
		Federal	Non-Federal <sup>1</sup>	Total	Federal	Non-Federal <sup>1</sup>	Total
Hawk Mountain.....	(2)	-----	42,000	42,000	-----	291	291
Newark.....	(3)	-----	15,300	15,300	-----	190	190
Christiana.....	(3)	-----	18,000	18,000	-----	302	302
Subtotal.....		-----	75,300	75,300	-----	783	783
Prompton <sup>4</sup> .....	(5)	470	4,500	4,970	30	54	84
Tocks Island.....	(6)	93,500	28,500	122,000	1,872	98	1,970
Bear Creek <sup>4</sup> .....	(5)	4,290	9,110	13,400	56	64	120
Beltzville.....	(5)	6,260	7,540	13,800	60	48	108
Aquashicola.....	(5)	8,600	10,400	19,000	41	44	85
Trexler.....	(5)	4,330	5,770	10,100	57	47	104
Maiden Creek.....	(5)	9,800	17,800	27,600	83	55	138
Blue Marsh.....	(5)	7,090	5,410	12,500	73	38	111
Subtotal.....		134,900	89,100	224,000	2,260	450	2,710
Total.....		134,900	164,400	299,300	2,260	1,240	3,500

MAJOR PROJECTS TO BE DEVELOPED IN 2 STAGES <sup>7</sup>

Paulina.....	(3)	-----	23,100	23,100	-----	221	221
Pequest.....	(3)	-----	16,300	16,300	-----	115	115
Hackettstown.....	(3)	-----	28,000	28,000	-----	553	553
New Hampton.....	(3)	-----	29,600	29,600	-----	332	332
Tohickon.....	(3)	-----	21,800	21,800	-----	276	276
Newton.....	(3)	-----	46,400	46,400	-----	415	415
French Creek.....	(3)	-----	18,700	18,700	-----	332	332
Evansburg.....	(3)	-----	23,800	23,800	-----	345	345
Total.....		-----	208,000	208,000	-----	2,590	2,590

## SMALL CONTROL PROJECTS

Parkside.....	(8)	1,000	9 21	1,020	-----	0.3	0.3
Swiftwater.....	(8)	1,030	9 47	1,080	-----	.3	.3
Jim Thorpe.....	(8)	445	9 24	469	-----	.3	.3
36 small projects.....	(10)	6,270	782	7,060	-----	11.0	11.0
Total.....		8,750	874	9,630	-----	12.0	12.0
Total plan.....		143,000	374,000	517,000	2,260	3,840	6,100
Total plan <sup>11</sup> .....		203,000	388,000	591,000	5,940	4,360	10,300

<sup>1</sup> Excludes costs and benefits for indirectly related recreation except at Tocks Island.<sup>2</sup> Water supply, recreation, and power.<sup>3</sup> Water supply and recreation.<sup>4</sup> Costs and benefits for adding water supply and recreation to existing flood control project.<sup>5</sup> Water supply, recreation, fish and wildlife, and flood control.<sup>6</sup> Water supply, recreation, fish and wildlife, flood control, and conventional power.<sup>7</sup> Operations, maintenance, and replacement costs are for initial stage only.<sup>8</sup> Flood control and recreation.<sup>9</sup> Excludes nominal amount for optional recreation facilities.<sup>10</sup> Flood control.<sup>11</sup> Includes pumped-storage hydro at Tocks Island and indirect recreation in other 18 major projects.

*Project economics.—**Costs and benefits in thousands of dollars*

[Totals may not agree with sums due to rounding]

Project	Annual economic cost <sup>1</sup>	Annual benefits					Benefit-to-cost ratio	Estimated date of need
		Flood control	Directly related recreation	Power	Water supply	Total <sup>1</sup>		
MAJOR CONTROL PROJECTS								
Hawk Mountain-----	2,760	-----	291	755	2,180	3,220	1.2	2001
Newark-----	998	-----	876	-----	794	1,670	1.7	1975
Christiana-----	1,260	-----	1,730	-----	639	2,370	1.9	1980
Prompton <sup>2</sup> -----	349	295	130	-----	307	437	1.3	1974
Tocks Island-----	7,700	1,460	10,000	1,820	3,800	17,100	2.2	1975
Bear Creek <sup>3</sup> -----	714	1,060	161	-----	1,300	1,461	2.1	1989
Beltzville-----	683	286	174	-----	669	1,130	1.7	1965
Aquashicola-----	876	293	159	-----	485	936	1.1	1981
Trexler-----	553	114	281	-----	464	853	1.6	1972
Maiden Creek-----	1,390	244	424	-----	833	1,501	1.1	1982
Blue Marsh-----	643	302	217	-----	531	1,050	1.6	1969

MAJOR PROJECTS TO BE DEVELOPED IN 2 STAGES <sup>3</sup>

Paulina.....	766	-----	960	-----	-----	960	1.3	-----
Pequest.....	350	-----	499	-----	-----	499	1.4	-----
Hackettstown.....	1,420	-----	2,400	-----	-----	2,400	1.7	-----
New Hampton.....	1,040	-----	1,440	-----	-----	1,440	1.4	-----
Tohickon.....	898	-----	1,200	-----	-----	1,200	1.3	-----
Newton.....	1,970	-----	1,800	-----	-----	1,800	.9	-----
French Creek.....	876	-----	1,440	-----	-----	1,440	1.6	-----
Evansburg.....	1,170	-----	1,500	-----	-----	1,500	1.3	-----

SMALL CONTROL PROJECTS <sup>4</sup>

Parkside.....	37	42	-----	-----	-----	42	1.1	-----
Swiftwater.....	39	71	-----	-----	-----	71	1.8	-----
Jim Thorpe.....	17	18	-----	-----	-----	18	1.03	-----
36 small projects.....	267	457	-----	-----	-----	457	1.7	-----

<sup>1</sup> Excludes costs and benefits for indirectly related recreation except at Tocks Island. Costs and benefits for Tocks Island include \$3,476,000 and \$6,341,000, respectively, for indirectly related recreation.

<sup>2</sup> Costs and benefits for adding water supply and recreation to existing flood control projects.

<sup>3</sup> Site acquisition for recreation immediately and development for water supply as needed.

<sup>4</sup> To be accomplished under existing authorities and continuing programs.

Local cooperation.—Local interests are required to give assurances that they will—

(1) Make demands for the use of water storage within a period which will permit paying out the costs allocated to water supply within the life of the project; such costs to be determined by applying the percentages given in the report to actual costs for construction, operation, maintenance, and major replacement. These water supply costs are presently estimated at \$89,100,000 for construction and \$450,000 annually for maintenance, operation, and major replacements;

(2) Prevent encroachment on the stream channels downstream from the reservoirs to the extent needed to provide reasonably efficient reservoir operation;

(3) Hold and save the United States free from all water rights claims resulting from construction and operation of the reservoirs; and



(4) Agree to undertake establishment and prosecution of programs for the acquisition of lands, and to develop facilities as needed for the recreation developments assigned to them.

*Comments of States, municipalities, and Federal agencies.—*

State of New York: No objections to approval of eight major projects in which the Federal Government would participate but reserved any statement relative to the remainder of the plan until the basin commission has considered the plan.

State of New Jersey: Approved the eight major projects in which the Federal Government would participate but preferred to refrain from comment on the remainder of the plan until the basin commission has considered the plan.

State of Delaware: Objected to grouping of counties by subregions as used in the report; cited the urgent need for additional pollution investigations and water quality recovery research; contended that the report placed primary emphasis upon surface waters and relegated Delaware's water problems to a localized minor role; from a comparison of potentials, concluded that the two proposed reservoirs in Delaware and the Tocks Island Reservoir would be equally of national significance with regard to recreation; expressed the feeling that the flood damages in Delaware were not given sufficient coverage; questioned the estimates of future irrigatable land in Delaware as used in the report; objected to the report's failure to include in the plan of development the alternate sources of water to meet Delaware's needs; questioned the treatment of the water supply potentials of the proposed Brandywine development as planned by the Commonwealth of Pennsylvania; and pointed out the continuing need for information on water uses and the need to keep the planning report a "living document."

Commonwealth of Pennsylvania: Urged that attention and urgency be given to the construction of small reservoirs under Public Law 566 and Public Law 685; expressed the view that low flow augmentation will be needed to insure reasonable water quality in the Delaware Basin; stated that the proposed Hawk Mountain project would adversely affect trout and bass fisheries in that area; requested that consideration be given to the provision of workable fish passing facilities in the proposed dams; and, except as noted, gave general approval to the proposed plan.

City of Philadelphia: Expressed concern over the treatment in the report of water quality and quantity; objected to lack of data on direct and indirect costs of the plan to the city of Philadelphia; requested evidence that the costs and benefits would be shared equitably by all parties; and pointed out that the city did not participate directly in writing the report.

City of New York: Generally favorable with comments to clarify the influence, on the plan, of New York City's existing Delaware operations.

Department of Commerce: Pointed out the inadequacy of existing control and map information for the area; agreed with estimates of highway relocation costs with one major exception and suggested coordination with State highway officials; found that

Commerce could not concur in proposal for advance acquisition to preserve reservoir sites unless financing of the relocation of affected highways is included in the proposal; and noted that the effects of the projects on highway transportation costs had not been included in the economic analyses.

Department of Labor: Acknowledged receipt of report and offered no comment.

Department of Interior: Concurred generally in the proposed plan and the request for authorization to construct six major control projects and modify two existing Federal projects; assumed plan will be subject to continuing study, review, and modification as warranted; concurred in finding of national significance of Tocks Island recreation and full Federal funding; proposed modification of report to provide authority for corps to acquire land for conservation and development of fish and wildlife; concurred in proposal for advance acquisition of sites; agreed that proposed Tocks Island project be recommended for authorization and that further study be undertaken before conclusions regarding adjacent pumped storage potentials; requested further study of mineral activities at certain project sites; and agreed generally with the substance and recommendations of the report except as noted above.

Department of Agriculture: Noted that the report points out the need for programs concerned with the use and treatment of land and cover and advised that such programs are now underway in the basin by the Department of Agriculture; pointed out that the small control projects were appraised only for flood control and expressed the belief that additional small control project would be found economically feasible if appraised for multiple purposes; and requested that the report recommend Federal development of the power potential, including pumped storage, found economically feasible with provisions requiring preference to public bodies and cooperatives in the dispositions of the powers.

Department of Health, Education, and Welfare: Noted that the report contains no discussion of possible pollution control benefits; repeated U.S.P.H.S. recommendations regarding programs for water quality management and data collection; and recommended adoption of the vector control program as an integral part of the comprehensive plan.

Federal Power Commission: Reviewed the findings of the report with respect to power and concluded that the proposed plan will serve as a useful guide for continuing studies of efficient utilization of the water resources of the basin.

*Comments of the Bureau of the Budget.*—No objection to submission of report to Congress. However, considers that in view of recent legislation approving the Delaware compact and creating the Delaware River Basin Commission, the formal adoption by Congress of the recommended comprehensive plan for the Delaware River Basin is unnecessary but believes the eight projects recommended for construction should be authorized. Also, in connection with the complete development of the recreation potentials of the Tocks Island project, wholly at Federal expense, the Director of the Bureau of the Budget finds that such development would be appropriate and in accord with



the program of the President, provided suitable entrance, admission, and other user fees are established.

*Remarks.*—The committee notes that disastrous flooding in 1955 and Supreme Court authorizations for diversion of 900 million gallons of water per day for water supply focused attention on the need for comprehensive planning for the control and use of the basin's water resources. It notes that the recommended projects are needed to reduce flood heights on the Delaware River and its tributaries and to provide supplemental water for domestic and industrial water supply. In addition, it notes that reservoirs created by the dams will meet a substantial portion of the growing demand in the area for public outdoor water-associated recreation. The committee notes that the projects are amply justified and recommends adoption at this time.

The Chief of Engineers had indicated that the total cost of the recommended comprehensive plan of development of the Delaware River Basin would be about \$224 million. Included in this \$224 million is about \$31,600,000 which would be used for the acquisition of additional lands for a proposed national recreational area. The net Federal cost would be \$192,400,000. Since there is other legislation pending before the Congress which deals with the matter of recreation in the Tocks Island Reservoir area in New Jersey and Pennsylvania, it was felt that the authorization for this particular aspect of the project should be deferred until consideration has been given to the plan for overall recreational development.

The committee in approving the comprehensive plan of development for the Delaware River Basin desires to make it clear that no judgment was reached by the committee on Federal participation in the three projects—Hawks Mountain, Newark, and Christiana. This question of Federal participation in these three projects is open for further study.

#### NORTH BRANCH, POTOMAC RIVER, MARYLAND AND WEST VIRGINIA

(H. Doc. 469, 87th Cong.)

*Location.*—The North Branch of Potomac River rises near the western boundary of Maryland, flows generally northeast between Maryland and West Virginia, and joins the South Branch about 20 miles below Cumberland, Md., to form the Potomac River. It drains 1,328 square miles of predominantly mountainous terrain with elevations ranging from 4,860 to 600 feet above mean sea level.

*Authority.*—In full response to House Public Works Committee resolution adopted July 29, 1955, and in partial response to resolutions of the Senate Public Works Committee adopted September 14, 1955, January 26, 1956, and July 6, 1959, as amended April 27, 1960, and to resolution, House Public Works Committee adopted August 16, 1950.

*Existing project.*—A local flood-protection project for Cumberland, Md., and Ridgeley, W. Va., completed in May 1959, provides for channel improvements, floodwalls and levees, interior drainage facilities, and an industrial dam. The cost to the Federal Government for new work was \$15,600,000, exclusive of \$1,400,000 contributed by local interests and \$50,000 from emergency relief funds.



Additional items such as bridges, streets, and rights-of-way increased the total cost to local interests to \$2,900,000. In 1939, the Works Progress Administration, under sponsorship of the Upper Potomac River Commission, initiated construction of an earth and rockfill dam on Savage River about 4.5 miles above its junction with the North Branch. Work was suspended in 1942 because of World War II, and resumed in 1949 under supervision of the Corps of Engineers. The project was completed in January 1952 and transferred to the Upper Potomac River Commission on July 1, 1953 for operation and maintenance. The total cost was \$6,237,000, of which \$1,142,000 was contributed by local interests. The reservoir capacity of 20,000 acre-feet permits regulation of stream flow for industrial and domestic water supply and pollution abatement and provides some incidental flood control.

*Flood problem.*—Six damaging floods have occurred in the past 23 years. Over 11,000 acres of valley land along the North Branch and its tributaries have been subjected to frequent and severe floods. Urban areas have been flooded to depths of 10 feet. The largest flood above Cumberland in recent years occurred in March 1924 and caused the loss of five lives. Recurrence of that flood with present stage of development and with Savage River Reservoir in operation would cause damages of \$5,200,000. Average annual flood damages under present conditions are \$891,800.

*Recommended plan of improvement.*—Provides for construction on the North Branch of Potomac River, Md. and W. Va., of a dam and reservoir in the vicinity of Bloomington, Md., for flood control, water supply, water quality control, and recreation, generally in accordance with the plan of the district engineer. The dam would be a concrete gravity structure with an earthfill embankment on the right abutment, approximately 1,930 feet long, with a maximum height of about 287 feet above the streambed. The dam would contain a gated spillway controlled by three tainter gates.

*Estimated cost (price level of January 1961).*—

Federal.....	\$50,965,000
Non-Federal.....	( <sup>1</sup> )
Total.....	50,965,000

<sup>1</sup> \$16,935,000 to be reimbursed by local interests for water supply.

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$1,288,000	\$690,800	\$1,978,800
Maintenance, operation and major replacements.....	145,000	55,000	200,000
Economic cost of land.....	7,500	6,000	13,500
Total.....	1,440,500	751,800	2,192,300
Annual benefits:			
Damages prevented.....			585,300
Water supply.....			1,283,300
Water quality.....			1,593,400
Recreation.....			120,700
Total.....			3,582,700

*Benefit-cost ratio.*—1.6.

*Local cooperation.*—The requirements of local cooperation consist principally of the repayment of costs allocated to low-flow augmentation. Local interests must agree to pay all the costs allocated to water supply amounting to 33.2 percent of the construction cost of the project and presently estimated at \$16,935,000, to be paid either in a lump sum prior to commencement of construction or in installments prior to commencement of pertinent work items in accordance with construction schedules as required by the Chief of Engineers; or as an alternative, contract with the United States to repay, within a period of 50 years, a portion of the costs allocated to water supply on the basis of initial requirements, amounting to 5.8 percent of the construction cost and presently estimated at \$2,943,000, plus interest during construction on this amount, with interest on the unpaid balance and with payments to begin when storage is first available for water supply; furnish assurances satisfactory to the Secretary of the Army that they will repay the remaining costs allocated to water supply on the basis of future requirements, amounting to 27.4 percent of the construction cost, presently estimated at \$13,992,000, plus interest during construction on this amount with interest on the unpaid balance, beginning 10 years after storage is first available for water supply and with final payment to be made 50 years thereafter, except that no interest will be charged thereon for the first 10 years after storage is first available for water supply; contract with the United States to pay the operation and maintenance costs allocated to water supply presently estimated at \$47,000 annually, beginning when storage is first available for water supply; agree to pay the major replacement costs allocated to water supply as such costs are incurred, presently estimated to average \$8,000 annually; furnish assurances satisfactory to the Secretary of the Army of their intent to control pollution of the streams subject to low-flow augmentation by adequate treatment or other methods of controlling wastes at their source; and furnish assurances satisfactory to the Secretary of the Army that they will protect downstream channels from encroachments which would adversely affect operation of the project. Many beneficiaries are involved. At present no entity has agreed to furnish the required local cooperation. Establishment of a legally constituted local body capable of performing this function is essential and is under consideration.

*Comments of the State and Federal agencies:*

- Department of the Interior: Favorable.
- Department of Commerce: Favorable.
- Department of Health, Education, and Welfare: Favorable.
- Department of Agriculture: Favorable.
- National Power Commission: Favorable.
- National Capital Regional Planning Council: Favorable.
- Chairman, Interstate Commission on Potomac River: Favorable.
- District of Columbia: Favorable.
- State of West Virginia: Favorable.
- Commonwealth of Pennsylvania: Favorable.
- Commonwealth of Virginia: Favorable.
- State of Maryland: Favorable.



*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee notes that the proposed multiple-purpose dam and reservoir on the North Branch of the Potomac River is necessary and will meet a substantial portion of the present needs for flood protection, domestic and industrial water supply, water quality control, and recreation in the basin above Cumberland, Md. It notes that the project is warranted and is amply justified.

#### NORFOLK, VA.

(H. Doc. 354, 87th Cong.)

*Location.*—Norfolk, Va., is on the port of Hampton Roads, about 180 miles southeast of Washington, D.C., and about 20 miles west of the confluence of Chesapeake Bay and the Atlantic Ocean. The major portion of the city's shore frontage is on the Elizabeth River and its eastern branch, and is not exposed to high waves from Chesapeake Bay and the Atlantic Ocean.

*Authority.*—In partial response to Public Law 71, 84th Congress, 1st session, approved June 15, 1955.

*Existing project.*—There are no existing or authorized hurricane projects in the area. The existing Federal navigation project provides for depths of 40 feet in Elizabeth River, 18 to 25 feet in the eastern and western branches, and 12 feet in the short channel up Scotts Creek. The Elizabeth River and its southern branch are segments of the Atlantic Intracoastal Waterway.

*Flood problem.*—The downtown section of the city of Norfolk is subject to periodic flooding from hurricanes and northeast storm tides. This salt water flooding causes damages to commercial, residential, and other properties located in the low-lying areas and creates health, safety, and economic problems which adversely affect the welfare of the city.

*Recommended plan of improvement.*—Provides for a floodwall extending for about 2,750 feet from a grade point near Tazwell and Duke Streets along Tazwell, Boush, Main, Matthews, Water, and Granby Streets to a grade point in the rear of the U.S. customhouse, together with six closure structures and necessary adjustments to railroad and street crossings adjacent thereto; a storm drain pump station at the foot of the City Hall Avenue, together with necessary collector lines and appurtenances; and a sanitary sewage lift station in the floodwall at Fayette and Water Streets, together with necessary collector lines, force mains, valve chambers, and appurtenances. Subsequent to authorization of the recommended hurricane protection works, and with prior approval of the Chief of Engineers, if the city elects at its own expense to incorporate features in highway or other development works in the waterfront area which will serve the purpose of the hurricane protection works in the area of local construction, it is further recommended that the United States participate in the cost of such features on a basis such that the overall cost to the United States for hurricane protection shall not be greater than that which would apply in the absence of such features, and such that any resultant savings in the overall cost of the dual purpose features shall be shared equitably between the United States and the city on the basis of cost



allocation and cost apportionment approved by the Chief of Engineers; provided that such participation in the dual purpose features shall be subject to the undertaking of any necessary remaining hurricane protection works by the United States.

*Estimated cost (price level of June 1959).—*

Federal.....	\$1, 537, 000
Non-Federal.....	724, 000
Total.....	2, 261, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$60, 000	\$38, 500	\$99, 500
Maintenance and operation.....		15, 500	15, 500
Total.....	60, 000	55, 000	115, 000
Annual benefits: Damages prevented.....			178, 000

*Benefit-cost ratio.—1.5.*

*Local cooperation.—*(a) Provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project, at costs presently estimated at \$376,000; (b) accomplish without cost to the United States all relocations and alterations of sewerage and drainage facilities, buildings, utilities, and other structures made necessary by the work, exclusive of storm sewer, street, and railroad alterations forming an integral part of the protective works, at costs presently estimated at \$237,000; (c) bear 30 percent of the total first cost of the project, exclusive of betterments, a sum presently estimated at \$658,000, to consist of the items listed in subparagraphs (a) and (b) above and a cash contribution now estimated at \$45,000, to be paid either in a lump sum prior to initiation of construction, or in installments prior to commencement of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, the final apportionment of costs to be made after actual costs and values have been determined; (d) bear the entire cost of the items considered as betterments, including the sewage lift station, presently estimated at \$66,000; (e) hold and save the United States free from damages due to the construction work; and (f) maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army. Local interests have indicated willingness and ability to furnish requirements.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

State of Virginia: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.—*The committee was advised that Norfolk suffers major hurricane-flood damages. Floodwalls extending about 2,750 feet for the protection of a portion of the city was found to be economically justified. The committee notes that hurricane-flood protection is urgently needed and amply justified. The cost sharing is in accordance with the policy established in authorization of previous hurricane-flood protection projects.

## WRIGHTSVILLE BEACH, N.C.

(H. Doc. 511, 87th Cong.)

*Location.*—Wrightsville Beach is a resort community on a small island about 10 miles east of Wilmington, N.C.

*Authority.*—Public Law 71, 84th Congress, approved June 15, 1955.

*Existing project.*—None for hurricane protection.

*Hurricane problem.*—Six severe hurricanes and one minor hurricane have struck Wrightsville Beach during the period 1944 to 1960. Recurrence of the maximum hurricane tide of record caused by the hurricane of October 1954, under December 1960 prices and conditions would cause inundation and wave damages of over \$2,500,000. The average annual water damages are estimated at \$155,300.

*Recommended plan of improvement:* Provides for construction of a dune with crown width of 25 feet at elevation 15 feet, mean low water, integrated with a beach berm 50 feet wide at elevation 12 feet, mean low water, extending 14,000 feet from Moore's Inlet on the north to Masonboro Inlet on the south; and Federal participation in the cost of beach nourishment for a period not to exceed 10 years from year of completion of initial placement.

*Estimated cost (price level of December 1960).—*

Federal.....	\$345, 000
Non-Federal .....	191, 000
Total.....	536, 000

*Projects economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$13, 300	\$8, 900	\$22, 200
Maintenance and operation.....		5, 600	5, 600
Beach nourishment.....	2, 900	14, 700	17, 600
Total.....	16, 200	29, 200	45, 400
<b>Annual benefits:</b>			
Damages prevented.....			134, 000
Increased beach use.....			45, 900
Increased property use.....			16, 600
Total.....			196, 500

*Benefit-cost ratio.*—4.3.

*Local cooperation.*—Furnish lands, and rights-of-way; accomplish necessary relocations of buildings, streets, utilities, and other structures; bear 35.6 percent of the first cost consisting of the items above, and a lump-sum cash contribution presently estimated at \$191,000; hold and save the United States free from damages; maintain the works and nourish the beach, except that for the first 10 years the Federal Government would contribute an amount estimated at \$2,900 annually for nourishment; maintain current public ownership and use; adopt and enforce ordinances to preserve the improvement; control water pollution; obtain prior approval by the Chief of Engineers of plans for the beach protection work; contribute in cash for hurricane protection works in addition to the item above requiring a contribution of 35.6 percent, the added cost for separate construction of



the beach protection works; and annually inform local interests that the project will not provide substantial protection from ocean surges greater than Hurricane Hazel, October 15, 1954. Local interests have indicated their willingness to comply with the requirements of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of North Carolina: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.—*The committee notes that the project would provide shore protection and would alleviate hurricane damage from ocean surges. Six severe hurricanes have struck this area during the period from 1944 to 1960 and the committee believes that protective measures are needed as soon as they can be provided. The committee notes that the project is amply justified with a benefit-cost ratio of 4.3 and considers authorization of the work advisable.

CAROLINA BEACH AND VICINITY, NORTH CAROLINA

(H. Doc. 418, 87th Cong.)

*Location.—*The area is in New Hanover County, about 15 miles southeast of Wilmington, N.C., on the peninsula which separates the lower Cape Fear River from the Atlantic Ocean. The study covers about 7 miles of the shore and the towns of Carolina Beach and Kure Beach, also unincorporated communities of Wilmington Beach and Hanby Beach.

*Authority.—*Section 2 of Public Law 520, 71st Congress, approved July 3, 1930, and Public Law 71, 84th Congress, approved June 15, 1955.

*Existing project.—*No hurricane or beach protection projects.

*Beach erosion and hurricane problem.—*Intermittent surveys of the shore and offshore depths since 1938 indicate alternate erosion and accretion with a net accumulative loss of beaches. During the period 1900 to 1959, 22 hurricanes have affected Carolina Beach and vicinity. Recurrence of the maximum hurricane tide of record caused by the hurricane of October 1954, under January 1960 prices and conditions, would cause inundation and wave damages in the area estimated at \$5,500,000. The average annual future tidal damages in the area are estimated at \$380,800.

*Recommended plan of improvement.—*Provides for construction of a dune with a crown width of 25 feet at elevation 15 feet, mean low water, together with an integrated beach berm of 50 feet wide at elevation 12 feet, mean low water, extending about 25,800 feet from northern limits of Carolina Beach to southern limits of Kure Beach; initial deposition of sufficient suitable material north of Carolina Beach to serve as a feeder beach; and Federal participation in the cost of beach nourishment for a period not to exceed 10 years from the year of completion of the initial placement.



*Estimated cost (price level of January 1960).—*

Federal.....	\$739, 000
Non-Federal.....	500, 000
Total.....	1, 239, 000

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$28, 390	\$23, 420	\$51, 810
Maintenance and operation.....		14, 600	14, 600
Beach nourishment.....	6, 600	50, 100	56, 700
Total.....	34, 990	88, 120	123, 110
<b>Annual benefits:</b>			
Damages prevented.....			213, 500
Emergency cost saved.....			5, 300
Increased beach use.....			133, 900
Increased property use.....			23, 000
Total.....			375, 700

*Benefit-cost ratio.—3.1.*

*Local cooperation.*—Furnish lands and rights-of-way; accomplish necessary relocations of buildings, streets, utilities, and other structures; bear 40.3 percent of the first cost consisting of the items above, and a cash contribution presently estimated at \$500,000; hold and save the United States free from damage; maintain the works and nourish the beach, except that for the first 10 years the Federal Government will contribute an amount estimated at \$6,600 annually for nourishment; maintain current public ownership and use; adopt ordinances to preserve the improvement; control water pollution; obtain prior approval by the Chief of Engineers of plans for the beach protection work; contribute in cash for wave-protection works in addition to the item above requiring a contribution of 40.3 percent, the added cost for separate construction of the beach-protection works presently estimated at \$123,000; and, annually inform local interests that the project will not provide substantial wave protection during ocean surges greater than Hurricane Hazel, October 15, 1954. Local interests have indicated their willingness to comply with the requirements of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: No objection.

Department of Health, Education, and Welfare: No objection.

State of North Carolina: Favorable.

*Comments of the Bureau of the Budget.—No objection.*

*Remarks.*—The project would provide both shore protection and hurricane protection. The area from Carolina Beach south to Kure Beach experienced heavy losses in the hurricanes of 1944, 1954, 1955, and 1958. Recurrences of those hurricanes would cause total damages of \$11,800,000, based on January 1960 price levels. The committee notes the high benefit-cost ratio of 3.1 and recommends authorization.

## COMPREHENSIVE REPORT ON CAPE FEAR RIVER BASIN, N.C.

(H. Doc. 508, 87th Cong.)

*Location.*—The Cape Fear River is formed by the confluence of the Deep and Haw Rivers which rise in the north-central part of North Carolina in a region of rolling hills known as the Piedmont Plateau. It flows generally southeast and empties into the Atlantic Ocean at Cape Fear, N.C.

*Authority.*—Resolution of House Committee on Flood Control adopted May 2, 1946.

*Existing project.*—There are no Corps of Engineers flood control projects specifically authorized by Congress. Repairs and additions to the existing White Oak dike near Kelly, N.C., built by local interests, were authorized by the Chief of Engineers in November 1960 under the provision of Public Law 685, 84th Congress. Construction has been completed to provide protection to 20,200 acres from a flood equal to that of 1945. The Cape Fear River is navigable with a depth of 35 feet from the Atlantic Ocean to Wilmington, thence 25-foot depth to Navassa, and an 8-foot depth to Fayetteville.

*Flood problems.*—There is a need for protection of flood plains of Cape Fear River from disastrous floods. Recurrence of 1945 flood would cause damages from \$8 to \$15 million depending on rainfall distribution and season of the year. Average annual damages under present conditions are \$1,445,000. Fayetteville has experienced severe flood damages. Recurrence of the 1945 flood would flood 3,000 homes, 200 commercial and industrial establishments, churches and schools.

*Recommended plan of improvement.*—Recommend approval of a general plan consisting of New Hope, Randleman, and Howards Mill Reservoirs and other local flood control projects and reservoirs that are found feasible to be constructed as need develops; authorization of New Hope Reservoir for construction in the interests of flood control, low flow regulation, recreation, and other purposes, and that authority be granted to continue studies of Cape Fear River Basin in order that authorization for other projects may be prepared.

*Estimated cost (price level, average 1960 prices) of New Hope Reservoir.*—

Federal.....	<sup>1</sup> \$25, 143, 000
Non-Federal.....	319, 000
Total.....	25, 462, 000

<sup>1</sup> Exclusive of \$150,000 for preauthorization studies.

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$756, 000	\$9, 000	\$765, 000
Maintenance and operation.....	92, 000	8, 000	100, 000
Total.....	848, 000	17, 000	865, 000
Annual benefits:			
Flood control.....			1, 697, 000
Water quality control.....			77, 500
Water supply.....			46, 500
General recreation.....			405, 000
Fishing and hunting.....			114, 000
Total.....			2, 340, 000



*Benefit-cost ratio.*—2.5 (based on 100-year period of analysis).

*Local cooperation.*—Protect downstream channels from encroachments and obstructions which would adversely affect operation of the project; bear all the construction cost allocated to municipal and industrial water supply, presently estimated at \$319,000; and bear all annual cost for operation, maintenance, and major replacements allocated to municipal and industrial water supply, an amount presently estimated at \$8,000 annually. Local interests have provided assurances that the requirements of local cooperation will be met.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objections.

Department of Agriculture: Unfavorable.

Department of Commerce: No objections.

State of North Carolina: Favorable.

Federal Power Commission: No objections.

*Comments of the Bureau of the Budget.*—No objections.

*Remarks.*—The committee notes that proposed New Hope Reservoir is the key unit in a future comprehensive plan of development of the Cape Fear River Basin. The committee notes that additional investigation of other projects will be accomplished in the future. The project will provide needed flood control and will augment low stream flows along the main stem of the Cape Fear River. In addition, a valuable water supply will be provided for municipal and industrial use for which a local contribution in accordance with the Water Supply Act of 1958 will be provided. The committee notes that the project is amply justified with a benefit-cost ratio of 2.5 and considers authorization is advisable.

#### CHATTAHOOCHEE RIVER AT AND IN VICINITY OF WEST POINT AND FRANKLIN, GA.

(H. Doc. 570, 87th Cong.)

*Location.*—Chattahoochee River forms a portion of the border between Alabama and Georgia and drains the north-central portion of Georgia. The Chattahoochee River drainage basin is 440 miles long and averages 30 miles wide. The Chattahoochee and Flint Rivers join to form the Apalachicola River.

*Authority.*—Resolutions by the Committee on Public Works of the House of Representatives adopted July 29, 1955, and July 31, 1957.

*Existing project.*—Buford Dam in the extreme upper watershed for flood control, hydroelectric power, navigation, and other purposes; Jim Woodruff lock and dam on the lower river for navigation and hydroelectric power; and two other locks and dams on the Chattahoochee River which would provide navigation to Columbus, Ga., are nearing completion. The Soil Conservation Service has a small dam program on Bull Creek near Columbus, Ga. Many small privately owned dams for hydroelectric power.

*Problems.*—Buford Reservoir controls floods in the upper watershed. Average annual flood damage for the Chattahoochee River at and below West Point are estimated at \$600,000 principally in West Point, Columbus, and Phenix areas. There is also a growing demand for power in the area.



*Recommended plan of improvement.*—Construction of West Point Reservoir for hydroelectric power, flood control, navigation, and recreation. The dam would be located at river mile 201.4 and would form a reservoir of 553,000 acre-feet capacity; 282,000 acre-feet would be for power purposes except for flood control storage use of a maximum of 204,000 acre-feet from December through April. Storage of 158,000 acre-feet would also be usable for flood control above the power pool.

*Estimated cost (1961 price level).*—Federal, \$52,900,000.

*Project economics.*—

Annual charges:

Interest and amortization-----	\$1,635, 000
Maintenance, operation, and replacements-----	518, 000
Taxes foregone-----	518, 000

Total-----	2, 671, 000
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Annual benefits:

Flood control-----	481, 000
Power-----	2, 085, 000
Recreation-----	640, 000
Fish and wildlife-----	268, 000
Navigation-----	50, 000

Total-----	3, 524, 000
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*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Local interests shall agree to inform annually those affected, for a period of time as determined by the Chief of Engineers to be necessary, that the proposed project will provide partial protection from floods.

*Comments of the States and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: No objection.

Federal Power Commission: No objection.

Public Health Service, Department of HEW: No objection.

State of Alabama: Favorable.

State of Georgia: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget notes that the estimate of expected power revenues from the West Point project, furnished by the Southeastern Power Administration would be sufficient to repay the cost allocated to power only over a period of 100 years. The Bureau also notes that a major portion of the benefits and costs of this project have been assigned to power purposes.

The Bureau states that section 5 of the Flood Control Act of 1944 requires that power produced at reservoir projects under control of the Department of the Army be sold at rates which will recover costs of power production and transmission, including capital investment allocated to power, over a reasonable period of years. The Bureau further states that, as a matter of policy, a period of 50 years has been considered appropriate for the recovery of power investment. Such a period was most recently affirmed by the Congress as a condition of the authorization of Laurel River Reservoir in the Flood Control Act of 1960.

Accordingly, the Bureau would expect that construction of the West Point Reservoir, if authorized by the Congress, would not be undertaken until there is specific assurance that all costs allocated to power can be returned with interest within a period of 50 years.

The Bureau of the Budget advises that there is no objection to the submission of the report to the Congress.

*Remarks.*—The proposed West Point Reservoir, together with future measures, will provide valuable flood control benefits downstream from the dam on the Chattahoochee River from West Point to Columbus, Ga., and to areas along the river in Georgia and Alabama. The output from the electric power generating installation at the project can be used in supplying the growing powerload of the area. The flows from the dam and powerhouse will improve the quality of the water in the stream. Outdoor recreational opportunities will be afforded by the reservoir to the heavily populated metropolitan areas of Atlanta and Columbus. The committee considers the project to be justified and a highly desirable water resource development of the Chattahoochee River between Columbus and Atlanta.

#### FLINT RIVER, GA.

(H. Doc. 567, 87th Cong.)

*Location.*—Flint River rises 350 miles above its mouth and 1,000 feet above mean sea level in the southerly outskirts of Atlanta, Ga., the largest city in the Southeast. It crosses the fall line, marking the division of the Piedmont Plateau and the Coastal Plain, between river miles 230 and 285, falling 370 feet in 55 miles. It joins the Chattahoochee River to form the Apalachicola River, 108 miles above Apalachicola Bay, an arm of the Gulf of Mexico.

*Authority.*—Senate Public Works Committee resolution adopted June 1, 1948.

*Existing project.*—A local flood-protection project has been completed at Montezuma, Ga., and another at Americus, Ga., has been approved, both under the general authority for small flood-control projects. The authorized project now under construction provides for multiple-purpose developments and supplemental channel work to give a channel depth of 9 feet for a minimum width of 100 feet in the Apalachicola-Chattahoochee River upstream to Columbus, Ga., 268 miles, and 29 miles up Flint River to Bainbridge, Ga.

*Navigation and flood problem.*—Local interests state that there is a need for extending the 9-foot-deep navigable channel in the Flint River upstream from Bainbridge to Albany and beyond to serve the future needs of the area.

Average annual flood damages below the fall line total \$180,000. However, productive values of farm and urban land would increase substantially if flood control were provided.

*Recommended plan of improvement:* The comprehensive plan of water resource development consists of five dams and reservoirs as a guide for the immediate and future development of the water resources of the basin and that Spewrell Bluff, Lazer Creek, and Lower Auchumpkee Creek Reservoirs, for hydroelectric power, flood control, general recreation, and fishing recreation, be authorized for con-



struction and that Spewrell Bluff Reservoir be undertaken as the initial step.

*Estimated cost (1961 price level).—*

Federal.....	\$151, 820, 000
Non-Federal.....	2, 770, 000
Total.....	154, 590, 000

*Project economics.—*

[Thousands of dollars]

	Spewrell Bluff	Lazer Creek	Lower Auchumpkee	Total
Annual charges:				
Interest and amortization.....	1, 951	1, 246	1, 498	4, 695
Operation, maintenance, and major replace- ments.....	472	356	428	1, 256
Taxes forgone.....	684	626	583	1, 893
Total.....	3, 107	2, 228	2, 509	7, 844
Annual benefits:				
Power.....	2, 436	2, 206	2, 085	6, 727
Flood control.....	409	82	380	871
General recreation.....	432	254	404	1, 090
Fishing recreation.....	295	174	276	745
Navigation.....	34	9	15	58
Total.....	3, 606	2, 725	3, 160	9, 491
Benefit-cost ratios.....	1.2	1.2	1.3	1.2

*Local cooperation.*—Local interests shall agree to prevent encroachment on downstream channels that would interfere with the efficient operation of the proposed upstream reservoirs.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: No objection.

Department of Commerce: Favorable.

Federal Power Commission: Favorable.

State of Georgia: Favorable; but also desires authorization of navigation improvements.

State of Florida: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget notes that in his letter of May 2, 1962, the Administrator of the Southeastern Power Administration advised the division engineer that power revenues from the three upstream projects could be expected to total some \$4 million annually. The Bureau further notes that these revenues would be sufficient to repay the cost allocated to power only over a period of 100 years, and also that over 70 percent of the benefits and nearly 70 percent of the costs of the three projects have been assigned to power purposes. Apparently, none of the three would be economically justified without inclusion of the power features.

The Bureau states that section 5 of the Flood Control Act of 1944 requires that power produced at reservoir projects under control of the Department of the Army be sold at rates which will recover costs of power production and transmission, including capital investment



allocated to power, over a reasonable period of years. The Bureau further states that as a matter of policy a period of 50 years has been considered appropriate for the recovery of power investment. Such a period was most recently affirmed by the Congress as a condition of the authorization of Laurel River Reservoir in the Flood Control Act of 1960.

Accordingly, the Bureau would expect that construction of the three reservoirs, if authorized by the Congress, would not be undertaken until there is specific assurance that all cost allocated to power can be returned with interest within a period of 50 years.

The Bureau of the Budget advises that there is no objection to the submission of the report to the Congress.

*Remarks.*—The committee notes that the three reservoirs in the headwaters recommended for flood control, hydroelectric power generation, and outdoor recreation will provide valuable development of the water resources of the Flint River. After carefully considering all aspects of this matter and noting the expressions of non-Federal interests in developing the projects, the committee recommends authorization of the works without prejudice to consideration by the Federal Power Commission of non-Federal development of power, in conjunction with the Federal project for which application for license may be received and which may be found to be consistent with the optimum development of resources and in the public interest.

#### WEST PALM BEACH CANAL, CENTRAL AND SOUTHERN FLORIDA PROJECT

(S. Doc. 146, 87th Cong.)

*Location.*—West Palm Beach Canal extends from Lake Okeechobee southeasterly to Lake Worth at West Palm Beach on the Atlantic Ocean coast of Florida.

*Authority.*—Senate Public Works Committee resolution, adopted August 17, 1954.

*Existing project.*—There is no Federal project for the portion of the West Palm Beach Canal in this report. The central and southern Florida project provides certain improvements west and south of this section.

*Flood problem.*—Improvements for flood control and drainage are needed to alleviate flood losses to existing developments and to adequately protect and serve the area in the future.

*Recommended plan of improvement.*—The plan of improvement provides for enlargement of the lower 17 miles of West Palm Beach Canal and for a control structure near the mouth.

*Estimated cost: (price level of September 1960).—*

Federal.....	\$3, 220, 000
Non-Federal.....	1, 906, 000
Total.....	5, 126, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Primary works:			
Interest and amortization.....	\$116,000	\$75,000	\$191,000
Maintenance and operation.....		21,000	21,000
Loss in land productivity (economic cost).....			19,000
Total primary works.....	116,000	96,000	231,000
Associated works.....		125,000	125,000
Total.....	116,000	221,000	356,000
Annual benefits:			
Flood damages prevented.....			2,169,000
Increased land use.....			1,465,000
Total.....			3,634,000

*Benefit-cost ratio.*—10.3.

*Local cooperation.*—Local interests shall contribute 12.8 percent of the contract price plus supervision and inspection presently estimated at \$444,000; construct and maintain associated lateral drainage facilities; provide all lands, easements, and rights-of-way; make all bridge, roads, and utility relocations except railroad bridges and approaches; hold and save the United States free from damage; prevent encroachment on the channel and maintain and operate the completed works. Central and Southern Flood Control District would assume responsibility for local cooperation.

*Comments of the State and Federal agencies:*

Department of the Interior: No objection.

Department of Commerce: No objection.

Department of Agriculture: No objection.

State of Florida: Favorable to project but objects to procedures for cost sharing.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget notes that the Chief of Engineers, in his letter to the Department of the Interior, has stated his intention of coordinating with all interests concerned in undertaking the recently authorized investigation of means of supplementing existing water supplies to the Everglades National Park. The Bureau would, therefore, expect preconstruction planning of this project, if it is authorized, to be fully coordinated with this pending investigation in order that there will be adequate assurance before funds for construction are requested that the project will contribute to the achievement of maximum benefits to the region and the Nation from development of the water resources of the area.

The Bureau advises that there is no objection to submission of the report to Congress.

*Action by the Secretary of the Army.*—The Secretary of the Army noted the requirement in the report plan of the Chief of Engineers that local interests shall provide at their own expense lateral drainage facilities needed to realize the benefits from improvements in south Dade County. Recognizing that, in accomplishing necessary lateral drainage work, there may be participation by other Federal agencies under authorization not connected with this project, the Secretary stated that, if the project is authorized, this requirement of local co-

operation should be modified to permit local interests to construct and maintain the necessary associated drainage facilities of the plan with the assistance of other Federal and local conservation programs.

*Remarks.*—The committee considers the work to be needed and economically justified to a high degree. The benefit-cost ratio is 10.3 The committee notes the need for comprehensive investigation and consideration of water resource developments in the entire central and southern Florida flood control project area which would serve municipalities, industrial plants, agricultural areas, and the Everglades National Park in a feasible manner from an economic standpoint and which would be consistent with the economic growth of the area.

INTERIM REPORT ON BOGGY CREEK, FLA., CENTRAL AND SOUTHERN  
FLORIDA PROJECT

(S. Doc. 125, 87th Cong.)

*Location.*—Boggy Creek drainage area is in the central part of the Florida Peninsula in Orange County. The area extends southward from near Orlando to East Lake Tohopekaliga.

*Authority.*—Senate Public Works Committee resolution adopted November 15, 1954. (Partial response.)

*Existing project.*—There is no Federal project for Boggy Creek. However, the central and southern Florida project provides in part for flood control improvements from East Lake Tohopekaliga southward along the Kissimmee River to Lake Okeechobee.

*Flood problem.*—Local interests request that improvements to reduce the flood hazard in Boggy Creek basin be added to the authorized central and southern Florida project.

*Recommended plan of improvement.*—The plan of improvement provides that the central and southern Florida project be modified and extended by channel improvements and control structures in Boggy Creek from Lake Conway to East Lake Tohopekaliga.

*Estimated cost: (price level of December 1960).—*

Federal.....	\$1, 176, 000
Non-Federal.....	960, 000
Total.....	2, 136, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Primary work:			
Interest and amortization.....	\$44, 000	\$35, 000	\$79, 000
Maintenance and operation.....			9, 000
Loss in land productivity (economic cost).....			6, 000
Total primary work.....	44, 000	44, 000	94, 000
Associated work.....		19, 000	19, 000
Total.....	44, 000	63, 000	113, 000
Annual benefits:			
Flood damages prevented.....			61, 000
Increased land use.....			258, 000
Total.....			319, 000



*Benefit-cost ratio.*—2.8.

*Local Cooperation.*—Local interests are required to contribute 29.7 percent of the contract price plus supervision and administration presently estimated at \$454,000; construct and maintain associated lateral drainage facilities; provide all lands, easements, and rights-of-way; make all bridge, road and utility relocations, except railroad bridges and approaches; hold and save the United States free from damage; prevent encroachment on the channel; and maintain and operate the completed works. Central and Southern Flood Control District would assume responsibility for local cooperation.

*Comments of the State and Federal Agencies.*—

Department of the Interior: No objection.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

State of Florida: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee is cognizant of the local conditions in this area where inadequate drainage results in frequent flood damages. The recommended improvements are considered justified. The committee considers the requirements for local contributions for the project are fair and equitable and in accordance with existing policy for projects of this nature.

#### INTERIM REPORT ON SOUTH DADE COUNTY, FLA., AND CENTRAL AND SOUTHERN FLORIDA PROJECT

(S. Doc. 138, 87th Cong.)

*Location.*—The area under consideration is in the southeastern section of Dade County, Fla., south of Miami, along Biscayne Bay.

*Authority.*—Senate Public Works Committee resolution, adopted November 15, 1954 (partial response).

*Existing project.*—The central and southern Florida project provides, in part, for a levee around the area considered in this report. This levee, designated as L-31, and its control structures are for protection against most nonhurricane storm tides and for regulation of freshwater flow.

*Flood problem.*—There is need for an adequate system of canals to provide drainage for urban development, with water-control structures to prevent overdrainage of lands and contamination of ground water by salt water encroachment.

*Recommended plan of improvement.*—The plan of improvement provides for construction of 12 major outlet canals to drain by gravity the South Dade County area involved.

*Estimated cost (price level of October 1960).*—

Federal	\$13,388,000
Non-Federal	7,065,000
Total	20,453,000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Primary works:			
Interest and amortization.....	\$484,000	\$255,000	\$739,000
Maintenance and operation.....		115,000	115,000
Loss of productivity of lands (economic cost).....			40,000
Total primary works.....	484,000	370,000	894,000
Associated work.....		133,000	133,000
Total.....	484,000	503,000	1,027,000
Annual benefits:			
Flood damages prevented.....			1,897,000
Increased land use.....			1,772,000
Total.....			3,669,000

*Benefit-cost ratio.*—3.6.

*Local cooperation.*—Local interests are required to contribute 19.2 percent of contract price plus supervision and administration, presently estimated at \$2,953,000, to be paid prior to start of work units; construct and maintain associated lateral drainage facilities; provide all lands, easements, and rights-of-way; make all bridge, road, and utility relocations except railroad bridges and approaches; hold and save the United States free from damage; prevent encroachment on the channel; maintain and operate the completed works, and inform affected interests annually that the project will provide no protection from ocean surges.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: No objection.

State of Florida: Concurs in plan but objects to cost-sharing features, road relocation standards, and cost estimates of maintenance.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget notes that the Chief of Engineers, in his letter to the Department of the Interior, has stated his intention of coordinating with all interests concerned in undertaking the recently authorized investigation of means of supplementing existing water supplies to the Everglades National Park. The Bureau would, therefore, expect preconstruction planning of this project, if it is authorized, to be fully coordinated with this pending investigation in order that there will be adequate assurance before funds for construction are requested that the project will contribute to the achievement of maximum benefits to the region and the Nation from development of the water resources of the area.

The Bureau advises that there is no objection to submission of the report to Congress.

*Remarks.*—An adequate system of drains and canals is needed to permit proper development of this area of Dade County near Miami. The committee notes that this area is also adjacent to the Everglades National Park and that there is need for comprehensive investigation and consideration of water resource developments in the entire central and southern Florida flood control project area which would serve municipalities, industrial plants, agricultural areas, and the



Everglades National Park in a feasible manner from an economic standpoint and which would be consistent with the anticipated economic growth. The committee considers the recommended plan to be amply justified with a benefit-cost ratio of 3.6 and authorization is advisable.

INTERIM REPORT ON SHINGLE CREEK, FLA., CENTRAL AND SOUTHERN  
FLORIDA PROJECT

(S. Doc. 139, 87th Cong.)

*Location.*—Shingle Creek drainage area is in western Orange and Osceola Counties of central Florida. The area extends from Orlando southward to Lake Tohopekaliga.

*Authority.*—Senate Public Works Committee resolution adopted November 15, 1954 (partial response).

*Existing project.*—There is no Federal project for Shingle Creek. However, the central and southern Florida project provides in part for flood control improvements from Lake Tohopekaliga southward along Kissimmee River to Lake Okeechobee.

*Flood problem.*—Local interests request that improvements to reduce the flood hazard in Shingle Creek Basin be added to the authorized central and southern Florida project.

*Recommended plan of improvement.*—The plan of improvement provides that the central and southern Florida project be modified and extended by (a) channel improvements and control structures for flood control and drainage in Shingle Creek from Clear Lake to Lake Tohopekaliga, and (b) additional measures in Reedy Creek Swamp including construction work and land acquisition to be undertaken by the Federal Government. The recommendation further provides that the flood control and drainage works on Shingle Creek and the Reedy Creek Swamp wildlife management area may be constructed separately.

*Estimated cost.*—

	Shingle Creek	Reedy Creek Swamp	Total
Federal.....	\$2, 590, 000	\$660, 000	\$3, 250, 000
Non-Federal.....	1, 468, 000		1, 468, 000
Total.....	4, 058, 000	660, 000	4, 718, 000
Project economics:			
Primary works:			
Interest and amortization.....	145, 500	24, 000	169, 500
Maintenance and operation, project works.....	18, 500	2, 000	20, 500
Loss in productivity on lands (economic cost).....	4, 000		4, 000
Total, primary works.....	168, 000	26, 000	194, 000
Associated work.....	20, 000		20, 000
Total.....	188, 000	26, 000	214, 000
Annual benefits:			
Flood damages prevented.....	282, 000		282, 000
Increased land use.....	419, 000		419, 000
Outdoor recreation.....		74, 000	74, 000
Total.....	701, 000	74, 000	775, 000
Benefit-cost ratio.....	3. 7	2. 8	3. 6



*Local cooperation.*—For the Shingle Creek flood control and drainage work, local interests are required to contribute 25.9 percent of the contract price plus supervision and administration presently estimated at \$834,000; construct and maintain associated lateral drainage facilities; provide all lands, easements, and rights-of-way; make all bridge, road, and utility relocations except railroad bridges and approaches; hold and save the United States free from damage; prevent encroachment on the channel; and maintain and operate the completed works. Central and Southern Florida Flood Control District would assume responsibility for local cooperation on the Shingle Creek work. For the Reedy Creek Swamp wildlife management area, local interests would provide, prior to construction, assurances satisfactory to the Secretary of the Army that they will manage the wildlife area, maintain and operate the project works after completion in accordance with regulations prescribed by the Secretary of the Army, and hold and save the United States free from damage due to the construction work. The Florida Game and Fresh Water Fish Commission has stated it would operate and maintain the area for fish and wildlife programs to the extent of its financial ability.

*Comments of the State and Federal agencies.*—

Department of Interior: Favorable. Recommends Reedy Creek Swamp wildlife management area.

Department of Commerce: No objection.

State of Florida: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget would recommend with respect to cost sharing that the costs of fish and wildlife enhancement measures in this local protection project (Reedy Creek swamp wildlife management area) be divided equally between Federal and non-Federal interests. Such a division would accord generally with that established for such features incorporated in projects undertaken pursuant to the Watershed Protection and Flood Prevention Act and the Small Reclamation Projects Act. The Bureau advises that there is no objection to submission of the report to Congress.

*Action by the Secretary of the Army.*—Concurs with the Bureau of the Budget.

*Remarks.*—The committee recognizes that the facilities recommended for the main stem of Shingle Creek will reduce flood losses and will permit development of the area. Although the wildlife management in Reedy Creek Swamp area would serve as a valuable addition to the overall plan for the central and southern Florida project, the committee recommends that no obligation shall be incurred for development of this management area unless the State or one or more other non-Federal entities shall have entered into an agreement in advance to assume at least 50 percent of the cost associated with that feature of the project. The committee notes that the Shingle Creek and the Reedy Creek Swamp work are separable units and may be so undertaken for construction. On this basis, the committee believes authorization is warranted.

INTERIM REPORT ON CUTLER DRAIN AREA, FLORIDA—CENTRAL AND  
SOUTHERN FLORIDA PROJECT

(S. Doc. 123, 87th Cong.)

*Location.*—Cutler drain area comprising about 38 square miles in Dade County is located immediately south of Miami on the Atlantic coast of Florida.

*Authority.*—Senate Public Works Committee resolution, adopted November 15, 1954 (partial response).

*Existing project.*—There are no Federal improvements within the Cutler drain area. However, the area is encompassed by works of the central and southern Florida project.

*Flood problem.*—There is a need for flood control and drainage in the Cutler drain area which has experienced eight damaging floods since 1946.

*Recommended plan of improvement.*—The plan of improvement provides for improvement of the Cutler drain area for flood control and major drainage including a connecting canal to Snapper Creek Canal to permit diversion of fresh water supply from the north.

*Estimated cost (price level of April 1961).—*

Federal.....	\$2, 063, 000
Non-Federal.....	2, 104, 000
Total.....	4, 167, 000

*Project economics (price level of April 1961).—*

	Federal	Non-Federal	Total
Annual charges:			
Primary works:			
Interest and amortization.....	\$75, 800	\$75, 900	\$151, 700
Maintenance and operation.....		30, 300	30, 300
Loss in productivity of land (economic cost).....			35, 000
Total primary cost.....	75, 800	106, 200	217, 000
Associated work.....		17, 000	17, 000
Total.....	75, 800	123, 200	234, 000
Annual benefits:			
Flood damages prevented.....			333, 000
Increased land use.....			1, 017, 000
Total.....			1, 350, 000

*Benefit-cost ratio.*—5.8.

*Local cooperation.*—Local interests are required to construct and maintain associated lateral drainage facilities; provide all lands easements, and rights-of-way; make all bridge, road, and utility relocations except railroad bridges and approaches; hold and save the U.S. free from damage; prevent encroachment on the channel; and maintain and operate the completed works.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of HEW, PHS: No objection.

State of Florida: Favorable.



*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee finds that improvements in the Cutler drain area, together with other project works of the comprehensive central and southern Florida flood control plan, for flood control and major drainage are needed to serve the rapidly expanding population and the economic growth of this area. The committee notes that the benefit-cost ratio is 5.8 to 1 and believes the project to be amply justified. The committee notes the requirement in the recommendation of the Chief of Engineers that local interests shall provide at their own expense lateral drainage facilities needed to realize the benefits from the project. Recognizing that in accomplishing necessary drainage work, there may be participation by other Federal agencies under authorizations not connected with this project. The committee considers that local interests will be permitted to construct and maintain the necessary associated drainage facilities of the plan with the assistance of other Federal and local conservation programs.

The committee has noted that prior to the completion of the project planned by the Chief of Engineers, local interests proceeded with the construction of certain features which are essential to the protection of the area. Certain parts of these works constitute useful parts of the overall plan of protection. Therefore, the committee feels that local interest should receive credit for work carried forward and that the credit should be consistent with the cost-sharing arrangements for the central and southern Florida flood control project. It is estimated that the credit would not exceed \$124,000.

The item of local cooperation in the report plan of the Chief of Engineers concerning the provision of lateral drainage facilities by local interests at their own expense should be modified to permit local interests to construct and maintain these associated works with the assistance of other Federal and local conservation programs.

#### FOUR RIVER BASINS, FLORIDA

(H. Doc. 585, 87th Cong.)

*Location.*—The four river basins in this report consists of the drainage areas of four main streams in central and southwest peninsular Florida which rise at or within the Green Swamp region and certain intervening streams on the west coast of Florida. The four rivers are the Hillsborough, Oklawaha, Withlacoochee, and Peace Rivers. The city of Tampa is located on Hillsborough River.

*Authority.*—Nine resolutions of the Senate and House Public Works Committees and two items in acts of Congress.

*Existing project.*—There are several authorized navigation improvements including the Cross Florida Barge Canal, which will provide navigable channels in the lower reaches of the Withlacoochee and Oklawaha Rivers; the Pithlachascotee River from the Gulf of Mexico to Port Richey, Tampa Harbor; the Oklawaha River to Moss Bluff Dam; Withlacoochee River; Peace River and Anclote River. There are no flood control projects in the area.

*Flood problem.*—There is a water problem because of flooding and poor drainage during wet seasons and a lack of water during dry seasons to adequately meet demands for agricultural and domestic



use. Salt water enters Lake Tarpon from underground and, when the lake rises, damages surrounding land.

*Recommended plan of improvement.*—The plan of improvement provides for improvements of southwest Florida, drained by the Hillsborough, Oklawaha, Withlacoochee, Peace, Anclote, and Pithlachascotee Rivers, and Lake Tarpon for flood control, major drainage, and other purposes.

*Estimated cost (price level of October 1961).*—

Federal.....	\$59, 530, 000
Non-Federal.....	40, 250, 000
Total.....	99, 780, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Primary work:			
Interest and amortization.....	\$2, 201, 000	\$1, 475, 000	\$3, 676, 000
Maintenance and operation.....		328, 000	328, 000
Loss of land productivity (economic cost).....			601, 000
Total primary work.....	2, 201, 000	1, 803, 000	4, 605, 000
Associated work.....		241, 500	241, 500
Total.....	2, 201, 000	2, 044, 500	4, 846, 500
Annual benefits:			
Flood damages prevented.....			2, 906, 000
Increased land use.....			3, 383, 000
Fish and wildlife conservation.....			528, 000
Navigation.....			134, 000
Recreation.....			87, 000
Total.....			7, 038, 000

*Benefit-cost ratio.*—1.5.

*Local cooperation.*—Local interests are required to contribute 14 percent of the contract price plus supervision and administration presently estimated at \$8,930,000; construct and maintain associated lateral drainage facilities; provide all lands, easements and rights-of-way; make all bridge, road, and utility relocations except railroad bridges and approaches; hold and save the United States free from damage; preserve outlet waterways needed for the proposed work; and maintain and operate the completed works. The Southwest Florida Water Management District would assume responsibility for local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: No objection.

Department of Health, Education, and Welfare: No objection.

State of Florida: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget suggests that further consideration be given to the matter of a local cash contribution toward the cost of the project for benefits to recreational boating. The Bureau recommends that the cost allocated to fish and wildlife enhancement features in projects of this kind be divided equally between the Federal Government and local interests.

*Action by the Secretary of the Army.*—The Secretary concurs in the views of the Bureau of the Budget and recommends that the local cash contribution be 17 percent, an amount presently estimated at \$10,700,000. On this basis, the net cost of this work to the United States is estimated at \$57,760,000.

*Remarks.*—The proposed project would be designed to provide protection to agricultural areas from floods which occur once in 10 years. Works in the Hillsborough River Basin, including the Tampa bypass, would be designed to safely pass a 1-in-200-year flood to give adequate protection to the concentrated urban development at Tampa. Large benefits would accrue to the project in the prevention of flood damages and enabling higher and more extensive use of areas now subject to flooding. There are considerable benefits attributable to collateral uses such as navigation and recreation; conservation of wildlife, water, and soil resources; and improvement of ground water levels.

The committee finds that certain cost sharing would be warranted in this particular case because of the local flood protection aspects of the project. The Secretary of the Army has recommended, based on views of the Bureau of the Budget, additional cost sharing in the work because of fish and wildlife enhancement and recreational boating. The committee concurs in this recommendation at this time. The net Federal cost of the project would be \$57,760,000.

#### CHUNKY CREEK, CHICKASAWHAY AND PASCAGOULA RIVERS, MISS.

(H. Doc. 549, 87th Cong.)

*Location.*—The Pascagoula River drains most of southeast Mississippi and a small part of southwest Alabama, covering an area of 9,700 square miles. It discharges into the Gulf of Mexico at Pascagoula, Miss.

*Authority.*—This report is in full response to section 11 of the Flood Control Act adopted July 24, 1946, and to the House Committee on Public Works resolution adopted June 26, 1952.

*Existing project.*—Sowashee Creek channel at Meridian, Miss., was improved for flood control in 1955 under general congressional authority for construction of small flood control projects, at a Federal cost of \$142,600.

*Flood problem.*—Okatibbee and Chunky Creeks join to form the Chickasawhay River which flows 164 miles to join the Leaf River and form the Pascagoula River. There is a serious flood problem along Okatibbee Creek for 37 miles above its mouth and along the 18-mile upstream reach of the Chickasawhay River. The total flood plain covers 27,000 acres, of which 650 acres are urban.

*Recommended plan of improvement.*—A reservoir located 38 miles above the mouth of Okatibbee Creek and 7 miles northwest of Meridian, for flood control, recreation (both general and fish and wildlife), and municipal and industrial water supply. Gross storage would be 109,800 acre-feet, with 80,600 acre-feet for flood control, 8,500 acre-feet for water supply and recreation, and the balance for sediment accumulation. The flood control storage would provide partial protection as far as 18 miles downstream along the Chickasawhay River. The water supply storage would provide a dependable yield of 25 million gallons



daily. Basic facilities for public access and use of the project area would be provided.

*Estimated cost (price level of 1961).*—Federal <sup>1</sup> \$6,740,000.

*Project economics.*—

*Annual charges (Federal):*

Interest and amortization.....	\$210, 000
Maintenance and operation.....	60, 000
Total.....	270, 000

*Annual benefits:*

Flood control.....	159, 000
General recreation.....	125, 000
Fish and wildlife recreation.....	60, 000
Municipal and industrial water supply.....	50, 000
Total.....	394, 000

*Benefit-cost ratio.*—1.5.

*Local cooperation.*—Furnish, prior to construction, assurances satisfactory to the Secretary of the Army that they will: hold and save the United States free from damages from water rights claims resulting from construction and operation of the project; prevent encroachment and obstruction of downstream channels which would adversely affect operation of the project; and pay the United States, in accordance with the Water Supply Act of 1958 as amended, the entire amount of the construction costs allocated to water supply, presently estimated at \$1 million, and the entire amount of operation, maintenance, and replacement costs allocated to water supply, presently estimated at \$3,000 annually, the final amounts to be determined after actual costs are known. The city of Meridian has assured that they will cooperate in the development of plans and, upon approval of construction by Congress or when plans are completed, will make a firm determination of the extent the city could participate in the project.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Mississippi: Favorable.

*Comments of the Bureau of the Budget.*—No objection. However, the Bureau would expect that prior to any request for funds to initiate construction of the project, it would be reevaluated in the light of the administration's standards and policies, pertaining to recreation, applicable at that time.

*Remarks.*—The area long Okatibbee Creek and Chicasawhay River is subject to frequent flooding. The proposed dam on Okatibbee Creek

<sup>1</sup> Includes construction costs allocated to water supply of \$1,000,000 to be reimbursed in accordance with the Water Supply Act of 1958.



would provide partial protection for approximately 26,850 acres, of which 650 acres are urban and 26,200 acres are rural. The urban areas contain 132 dwellings, 18 small business and service establishments, a textile mill, and a Federal fish hatchery. The average annual flood damages in the area amount to \$227,800 of which a substantial part would be prevented by the improvements. The water demands of the city of Meridian are estimated to increase from 5.5 million gallons per day in 1960 to 25 million gallons per day by the year 2015. Okatibbee Creek Reservoir would provide a water supply storage of 8,500 acre-feet to meet the expanding needs of Meridian as well as provide recreation and fish and wildlife benefits. The committee considers the project is amply justified and is a key unit in the water resource development of the Pascagoula River Basin.

#### MISSISSIPPI RIVER DELTA AT AND BELOW NEW ORLEANS, LA.

(H. Doc. 550, 87th Cong.)

*Location.*—The study area covered in this report is in the coastal region of Louisiana. It includes the lands subject to inundation by hurricane tides extending on both banks of the Mississippi River from the vicinity of New Orleans to the Gulf of Mexico and from the south shore of Lake Borgne and Chandeleur Sound to Barataria Bay.

*Authority.*—Public Law 71, 84th Congress, 1st session, June 15, 1955.

*Existing project.*—The main river levees which are part of the Federal project "Flood control, Mississippi River and tributaries," range in elevation on the east bank from 24 feet mean sea level at New Orleans to 14 feet at Bohemia, La., and on the west bank from 24 feet opposite New Orleans to 9 feet at Venice, La. These levees have not been overtopped from the riverside by hurricane tides since they were constructed to present grades.

*Flood problem.*—During the period of recorded history of Louisiana, 151 known hurricanes or tropical storms have struck or threatened the State. There have been 12 hurricanes which caused major damages and 10 hurricanes or tropical storms causing minor damages within the study area since 1893.

*Recommended plan of improvement.*—Prevention of hurricane tidal damages by increasing the heights of the existing back levees and modifying the existing drainage facilities where necessary in four separate reaches consisting of the west bank for about 15 miles between City of Price and Empire (design grade 13.5); the west bank for about 21 miles between Empire and Venice and with such modifications of the main levee as may be required (design grade 13.5); the east bank for about 16 miles between Phoenix and Bohemia (design grade 13 and 14); and the east bank for about 8 miles between Violet and Verret (design grade 12).

*Estimated cost.*—

Federal.....	\$7, 502, 000
Non-Federal.....	3, 216, 000
Total.....	10, 718, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$226, 200	\$124, 500	\$350, 700
Maintenance, operation, and major replacements.....		5, 500	5, 500
Economic loss on lands.....		5, 400	5, 400
Total.....	226, 200	135, 400	361, 600
Annual benefits: Damages prevented.....			801, 000

*Benefit-cost ratio.*—2.2.

*Local cooperation.*—(a) Provide all lands, easements, and rights-of-way, including borrow areas and spoil disposal areas necessary for the construction of the project, at costs presently estimated at \$772,000; (b) accomplish all necessary alterations and relocations to roads, pipelines, cables, wharves, and other facilities required by the construction of the project, at costs presently estimated at \$600,000; (c) bear 30 percent of the first cost, a sum presently estimated at \$3,216,000; to consist of the items listed in subparagraphs (a) and (b) above and a cash contribution presently estimated at \$1,844,000, to be paid either in a lump sum prior to initiation of construction or in installments prior to start of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, or, as a substitute for any part of the cash contribution, accomplish in accordance with approved construction schedules items of work of equivalent value as determined by the Chief of Engineers, the final apportionment of costs to be made after actual costs and values have been determined; (d) hold and save the United States free from damages due to the construction works; (e) Maintain and operate all works after completion in accordance with regulations prescribed by the Secretary of the Army; (f) prevent any encroachment on ponding areas unless substitute storage capacity or equivalent pumping is provided promptly; and (g) at least annually, notify those affected that the project will not provide complete protection from tidal flooding and that further local actions must be taken during hurricane emergencies.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Commerce: Favorable.

State of Louisiana: Favorable.

*Comments of the Bureau of the Budget:* No objection.

*Remarks.*—The committee notes that hurricane "Flossy" in September 1956 caused damages of about \$6 million in the Mississippi River Delta and that a recurrence of the September 29, 1915, hurricane would cause in excess of \$21 million under present development of the area. Some protection is provided by the Mississippi River levees. The trend in land use is presently from agricultural to industrial due to the increase in development of offshore petroleum resources. The pro-



posed plan of improvement is well justified and the local cooperation is in accord with the previously authorized projects for protection against hurricane tides.

#### RED RIVER IN NATCHITOCHES AND RED RIVER PARISHES, LA.

(H. Doc. 476, 87th Cong.)

*Location.*—The three projects considered are located on the Red River in central Louisiana in the vicinity of the town of Natchitoches. The areas concerned are primarily agricultural.

*Authority.*—Senate Public Works Committee resolutions dated March 11, 1957, and June 20, 1957; House Public Works Committee resolution dated April 21, 1950; and House Committee on Rivers and Harbors resolution dated February 25, 1938 (partial response).

*Existing project.*—Denison Dam on Red River at mile 734; Red River below Denison Dam in Arkansas, Oklahoma, Texas, and Louisiana, which provides for construction of reservoirs; Bayou Pierre, La., which provides for improvement of its lower 30 miles; East Point, La., which provides for construction of flood protection works in Loggy Bayou to the Coushatta Bayou area; and the Overton-Red River Waterway, La., which provides for construction of a channel 206 miles long and 9 feet deep to extend from Mississippi River mile 301 to Shreveport, La.

*Flood problem.*—Three small agricultural areas have been subjected to flooding from the Red River, Red River backwater and local runoff. The areas considered for protection were: Bayou Nicholas and Coushatta, Lake End to mouth of Bayou Pierre, and the Campti-Clarence area.

*Recommended plan of improvement: Bayou Nicholas Basin and Coushatta.*—Construct a ring levee system with one section extending from the bluff north of Highway 84 across Bayou Nicholas to the natural high Red River bank. A second segment would run from the high bank a short distance downstream to tie into the embankment of the Kansas City Southern Railway. A culvert would provide for local drainage.

*Campti-Clarence area.*—A ring levee extending from Campti along Red River to Saline Bayou, thence along the west bank of the Bayou to Chivery Dam, thence westward to the hill line southwest of Clear Lake. A saddle dike would be required about 4 miles east of Campti. The levee would be about 32 miles long and average 7.5 feet in height. Seven gated pipe culverts and landside ditches would be required for interior drainage, in addition to clearing and snagging of about 11 miles of Bourbeaux Bayou, closure of Bourbeaux Bayou near Chivery Dam, and enlargement of 5 miles of Chevreuille Bayou to provide a new outlet for Bourbeaux Bayou.

*Estimated cost (price level of April 1960).*—

	Bayou Nicholas	Campti-Clarence
Federal.....	\$55,000	\$1,293,000
Non-Federal.....	6,000	220,000
Total.....	61,000	1,513,000



*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Campti-Clarence area:			
Interest and amortization.....	\$40,477	\$19,225	\$59,702
Operation and maintenance.....		7,080	7,080
Replacements.....	3,434	882	4,316
Economic loss of land.....		1,430	1,430
Drainage.....	764	5,942	6,706
Total.....	44,675	34,559	79,234
Bayou Nicholas Basin and Coushatta:			
Interest and amortization.....	1,988	279	2,267
Economic loss of land.....		43	43
Operation and maintenance.....		190	190
Total.....	1,988	512	2,500
Annual benefits:			
Campti-Clarence area:			
Flood damage prevented.....			61,400
Land enhancement.....			35,700
Total.....			97,100
Bayou Nicholas Basin and Coushatta flood damages prevented.....			2,700

*Benefit-cost ratio.*—Nicholas Basin and Coushatta, 1.1; Campti-Clarence, 1.2.

*Local cooperation.*—Furnish lands, easements, and rights-of-way; make necessary relocations; maintain and operate; hold and save United States free from damages; prevent encroachment on improved channels; and organize drainage district.

*Comments of States and Federal agencies.*—

State of Louisiana: Favorable.

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—Subsequent to transmission of the report to Congress, the Chief of Engineers approved a flood protection project for Bayou Nicholas (Coushatta, La.), under the special small project program authorized by section 205 of the 1948 Flood Control Act as amended by Public Law 685, 84th Congress. Accordingly, no additional authorization is required for construction of this project.

## VINCE AND LITTLE VINCE BAYOUS, TEX.

(H. Doc. 441, 87th Cong.)

*Location.*—The watershed of Vince Bayou and its tributary, Little Vince Bayou, lies in Harris County, Tex., at and in the vicinity of Houston.

*Authority.*—Resolution, House Public Works Committee, adopted July 1, 1958.

*Existing project.*—There are no Federal improvements for flood control in the Vince Bayou watershed.

*Flood problem.*—Floods in this densely urbanized area are caused by thunderstorms, general storms, and torrential rainfall associated with hurricanes and other tropical disturbances. At least six major floods have occurred since 1928. Average annual damages are estimated at \$253,000.

*Recommended improvements.*—Channel improvement of Vince Bayou from the mouth (at Houston Ship Channel) upstream about 7.3 miles, and of Little Vince Bayou from the mouth upstream about 4.2 miles. Improved channels would have bottom widths of 10 and 15 feet in concrete-lined sections and 20 to 50 feet in unlined, earth sections.

*Estimated cost (January 1961 prices).*—

Federal.....	\$2, 224, 000
Non-Federal.....	1, 956, 000
Total.....	4, 180, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$83, 300	\$90, 000	\$173, 300
Maintenance and operation.....	0	27, 000	27, 000
Total.....	83, 300	117, 000	200, 300
Annual benefits: Flood damage prevention.....			237, 000

*Benefit-cost ratio.*—1.2.

*Local cooperation.*—Furnish lands, easements, rights-of-way, and spoil disposal areas; bear costs of all necessary alterations and relocations of utilities except railroad bridges; hold and save the United States free from damages; maintain and operate the project; prohibit encroachments on flood-carrying capacity of channels. Local interests agree.

*Comments of States and Federal agencies.*—

State of Texas: Favorable.

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee observes that this is a worthy project for flood protection in a highly developed and concentrated urban area. A high percentage of the construction cost is non-Federal, and the fact that local interests are willing to bear a high percentage of costs indicates a strong local desire and need for the project.

#### HURRICANE SURVEY OF PORT ARTHUR AND VICINITY, TEXAS

(H. Doc. 505, 87th Cong.)

*Location.*—Port Arthur is located on the west shore of Lake Sabine in the extreme southeast corner of Texas, about 14 miles from the Gulf of Mexico.

*Authority.*—Public Law 71, 84th Congress, approved June 15, 1955.

*Existing project.*—There are no existing Federal projects for hurricane protection in the Port Arthur area. Local interests have constructed a system of earth levees and seawalls for storm tide protection for the older portions of the developed area.

*Flood problem.*—Occurrence of a severe hurricane in the vicinity of Port Arthur would overtop the existing improvements and cause ex-

tensive damages to residential and industrial property. Also considerable development has occurred in the low coastal lands outside the existing protection system.

*Recommended plan of improvement.*—Provides for enlarging, strengthening, and extending the existing levees and seawall to protect with a single enclosure about 37,000 acres of Port Arthur, Groves, Lakeview, Pear Ridge, and Griffing Park, and intervening areas. Two separate industrial areas south of Taylors Bayou would be protected by ring levees. Additional pumping capacity for interior drainage would be provided.

*Estimated cost (price level of September 1961).*—

Federal.....	\$23, 380, 000
Non-Federal .....	10, 020, 000
Total.....	33, 400, 000

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$710, 000	\$340, 000	\$1, 050, 000
Maintenance and operation.....		100, 000	100, 000
Total.....	710, 000	440, 000	1, 150, 000
<b>Annual benefits:</b>			
Damages prevented.....			6, 388, 000
Land enhancement.....			122, 000
Total.....			6, 510, 000

*Benefit-cost ratio.*—5.7.

*Local cooperation.*—Furnish all lands, easements, and rights-of-way, including borrow areas; make alterations and relocations of buildings, pipelines and utilities; bear 30 percent of the total project cost to include the above items and a cash contribution presently estimated at \$9,330,000, the final apportionment of cost to be made after actual costs and values have been determined; hold and save the United States free from damages; maintain and operate all works; and prevent encroachment on the ponding areas that would reduce the capacity unless such is offset by additional pumping capacity. Local interests have indicated their willingness and ability to meet these requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

State of Texas: Favorable.

*Comment of the Bureau of the Budget.*—No objection.

*Remarks.*—The recommended plan of improvement will protect a residential and industrial area with a population of about 95,000 which has developed on the low coastal land north of Lake Sabine. Extensive petroleum processing and petrochemical industries are located in the area. The existing protective system constructed by local interests is inadequate and protects only the older developments. The improvement would provide a high degree of protection to a highly developed area. The committee considers the project exceptionally well justified.



## HURRICANE SURVEY OF FREEPORT AND VICINITY, TEXAS

(H. Doc. 495, 87th Cong.)

*Location.*—Freeport, Tex., is located at the mouth of the Brazos River about 43 miles southwest of Galveston.

*Authority.*—Public Law 71, 84th Congress, approved June 15, 1955.

*Existing project.*—There is no Federal flood or hurricane protection project at Freeport. Local interests have constructed a system of levees to protect the area between the Brazos River and Oyster Creek from ocean surges. Also the Freeport Harbor project provides for diversion of the Brazos River to the Gulf of Mexico southwest of the original river mouth, a dam at the point of diversion together with a levee along the diversion channel, and a deep-draft channel in the old river together with jetties at the entrance and turning basins in the harbor.

*Flood problem.*—Occurrence of severe storm tides in excess of 10 feet can overtop the existing protection system at low points with subsequent inundation of large residential and industrial areas.

*Recommended plan of improvement.*—Raising and enlarging about 40 miles of existing levee and the construction of nearly 5 miles of levee along Oyster Creek to extend the existing levee to high ground near Lake Barbara together with the necessary extension of existing drainage structures and road ramps. Also, the construction of two pumping plants for disposal of interior runoff.

*Estimated cost (price level of August 1961).*—

Federal.....	\$3, 780, 000
Non-Federal.....	1, 620, 000
Total.....	5, 400, 000

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$140, 000	\$63, 000	\$203, 000
Maintenance and operation.....		30, 000	30, 000
Total.....	140, 000	93, 000	233, 000
<b>Annual benefits: Damages prevented.....</b>			967, 000

*Benefit-cost ratio.*—4.2.

*Local cooperation.*—Furnish all lands, easements, and rights-of-way, including borrow areas; make alterations and relocations of buildings, utilities and other structures; bear 30 percent of the total project cost, to include the above items and a cash contribution presently estimated at \$1,545,000, the final apportionment of cost to be made after actual costs and values have been determined; hold and save the United States free from damages; maintain and operate after completion; and prevent encroachment on the ponding areas unless such is offset by additional pumping capacity. Local interests have indicated their willingness and ability to meet these requirements.

*Comments of State and Federal agencies.—*

State of Texas: Favorable.

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.—*The proposed plan of improvement would provide protection to an urban and industrial area that has a population of about 33,000 against a hurricane tide of about the magnitude of Carla in 1961. The committee notes that part of the area is undeveloped and pastureland but that most of this is expected to be developed in the future, even without protection, so that no land-enhancement benefits were credited to the improvement. The committee considers the requirements for local cooperation fair and equitable and in accordance with existing policy for projects of this nature.

## EAST FORK OF TRINITY RIVER, TEX.

(House Doc. 554, 87th Cong.)

*Location.—*The East Fork Basin of the Trinity River lies a few miles east of Dallas, Tex.

*Authority.—*Resolution of the Committee on Public Works, House of Representatives, adopted May 15, 1957.

*Existing project.—*Lavon Dam and Reservoir at river mile 55.9, for flood control and water supply storage, is the only Corps of Engineers project in the watershed. The Soil Conservation Service has completed about 100 detention reservoirs in the basin and local interests have constructed some levees downstream from Lavon Dam.

*Flood problem.—*Channel capacity of the river below Lavon Dam diminishes to about 500 cubic feet per second in the lower 10-mile reach, which is insufficient for uncontrolled runoff below Lavon Dam.

*Recommended plan of improvement.—*Enlargement of Lavon Reservoir to provide an additional 263,300 acre-feet of municipal and industrial water supply storage and channel enlargement and raising and straightening existing levees below the proposed Forney Dam site (to be built by city of Dallas) at mile 31.8 to the mouth.

*Estimated cost (price level of July 1961).—*

	Reservoir enlargement	Channel and levee improvement	Total
Federal.....	\$16,700,000	\$7,060,000	\$23,760,000
Non-Federal.....		380,000	380,000
Total.....	16,700,000	7,440,000	24,140,000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Reservoir enlargement:			
Interest and amortization.....	\$630,300		\$630,300
Maintenance and operation.....	8,200		8,200
Total.....	638,500		638,500
Levee and channel:			
Interest and amortization.....	255,800	\$14,800	270,600
Maintenance and operation.....		20,000	20,000
Total.....	255,800	34,800	290,600
Annual benefits:			
Reservoir enlargement:			
Water supply.....			1,005,000
Recreation.....			300,000
Total.....			1,305,000
Levee and channel: Damages prevented.....			386,400

*Benefit-cost ratio.*—Reservoir enlargement, 2.0; channel and levee, 1.3.

*Local cooperation.*—(a) Reservoir enlargement: Make demands for use of water supply storage so that allocated costs will be repaid within project life, such costs presently estimated at 85.1 percent of the total construction cost, amounting to \$14,215,000, and 80.5 percent of the additional annual maintenance, operation, and major replacement costs, amounting to \$6,600, with such modification in these amounts as may be necessary to reflect adjustments in the storage capacity for water supply and other purposes; hold and save the United States free from all water rights claims. (b) Levee and channel: Furnish all lands, easements, and rights-of-way; hold and save the United States free from damages; make all relocations and alterations to highways, highway bridges (except underpinning), utilities, buildings, pipelines, interior drainage facilities, and other structures (except railroad bridges and approaches); prevent encroachment on the improved channels and floodway; and maintain and operate. Local interests have indicated they are willing and able to meet these conditions.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Texas: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The proposed plan of improvement would provide a substantial and valuable increase in the municipal and industrial water supply storage available from the existing Federal project. Also it would provide a higher degree of flood protection to agricultural land downstream from the city of Dallas' Forney Dam site. Local interests have expressed their willingness to pay the costs allocated to water supply storage as well as the costs associated with the local flood protection measures. The committee believes the improvement is well justified and urgently needed.



## FORT WORTH FLOODWAY, TEX.

(H. Doc. 454, 87th Cong.)

*Location.*—On Clear Fork of Trinity River, a tributary to the West Fork in and near the city of Fort Worth.

*Authority.*—Resolution, House Public Works Committee, adopted June 27, 1957.

*Existing projects.*—Benbrook Reservoir on Clear Fork for flood control and water supply constructed by corps; existing Fort Worth floodway extending 13 miles along West Fork and 1.6 miles on Clear Fork; authorized 6.5-mile extension of existing floodway on West Fork. The Soil Conservation Service has completed and planned numerous small reservoirs in the headwaters reaches.

*Flood problem.*—Existing property values in the Clear Fork flood plain are in excess of \$32 million. May 1949 flood was largest of record. Reoccurrence would cause damages estimated at \$4,300,000. Last major flood occurred in 1957. Average annual damages under existing conditions, \$375,000.

*Recommended improvements.*—Extend existing floodway upstream on Clear Fork a distance of about 6.5 miles; provide levee protection in two areas.

*Estimated cost (January 1960 prices).*—

Federal.....	\$5, 148, 000
Non-Federal.....	2, 878, 000
<b>Total.....</b>	<b>8, 026, 000</b>

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$193, 800	\$149, 000	\$342, 800
Maintenance and operation.....	0	59, 900	59, 900
<b>Total.....</b>	<b>193, 800</b>	<b>208, 900</b>	<b>402, 700</b>
<b>Annual benefits: Flood damage prevention.....</b>			<b>886, 000</b>

*Benefit-cost ratio.*—2.2.

*Local cooperation.*—Furnish lands, easements, rights-of-way, and spoil disposal areas; bear costs of all necessary alterations and relocations of utilities except railroad bridges; hold and save the United States free from damages; maintain and operate the project; prohibit encroachments on flood-carrying capacity of channel. Local interests agree.

*Comments of States and Federal agencies.*—

State of Texas: Favorable.

Department of Interior: Favorable.

Department of Health, Education, and Welfare: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—This project is a worthy added segment to the existing and authorized works of improvement for flood control in the Fort Worth area. The project would protect highly valuable developments in the flood plain, and is clearly a needed project as evidenced by a benefit-cost ratio of 2.2.

## CLEAR FORK OF BRAZOS RIVER, ABILENE AREA, TEX.

(H. Doc. 506, 87th Cong.)

*Location.*—Elm Creek, together with several of its tributaries, courses through the city of Abilene, and joins the Clear Fork of the Brazos. Abilene is about 150 miles west of Fort Worth, in north-central Texas.

*Authority.*—Resolution, House Public Works Committee, adopted July 29, 1953.

*Existing project.*—None.

*Flood problem.*—Urban flood plain at Abilene is in excess of 7,300 acres with improvements valued at \$139 million. Average annual damages under existing conditions estimated at \$1,067,000.

*Recommended plan of improvement.*—The plan consists essentially of straightening and enlarging 36 miles of existing channel; paving 7.9 miles of the enlarged channel; clearing and snagging 5.4 miles of channel; constructing 2.3 miles of diversion dike; constructing, replacing, or modifying 33 highway bridges, 5 railroad bridges, 19 multiple-box culverts, and 7 low-water crossings.

*Estimated cost (price level of 1961).*—

Federal.....	\$31, 200, 000
Non-Federal.....	7, 400, 000
Total.....	38, 600, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$946, 500	\$371, 100	\$1, 317, 600
Maintenance, operation, and replacement.....		52, 000	52, 000
Total.....	946, 500	423, 100	1, 369, 600
Annual benefits: Flood damage prevention.....			2, 218, 000

*Benefit-cost ratio.*—1.6.

*Local cooperation.*—Furnish lands, easements, rights-of-way, and spoil-disposal areas; bear costs of all necessary alterations and relocations of utilities except railroads; hold and save the United States free from damages; prohibit encroachments on improved channels; maintain and operate the project. Local interests agree.

*Comments of the State and Federal agencies.*—

State of Texas: Favorable.

Department of Interior: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—This project would protect a large urban area with flood plain improvements valued at nearly \$140 million. Average annual damages under existing conditions are estimated in excess of \$1 million. The committee believes this to be a very worthy project.

## ALAMOGORDO, N. MEX.

(H. Doc. 473, 87th Cong.)

*Location.*—Alamogordo is located near the eastern edge of the Tularosa closed basin in south-central New Mexico about 85 miles north-east of El Paso, Tex.

*Authority.*—Section 206 of the Flood Control Act approved July 3, 1958.

*Existing project.*—No Federal flood control project in the basin. Local interests have constructed two separate channel and levee systems which are inadequate for overall protection.

*Flood problem.*—Thunderstorms over the canyons and arroyos, in the Sacramento Mountains, east of Alamogordo, generate high flows of short duration which spread over large sections of the city.

*Recommended plan of improvement.*—Provides for construction of about 6½ miles of diversion channel along the eastern city limits with a levee on the side toward the city, nearly 1 mile of channel improvement in Dilliard Draw north of the city, replacement of one railroad bridge, construction of three highway bridges, and with necessary alteration or modification at existing railroad and highway bridges.

*Estimated cost (price level of July 1961).*—

Federal.....	\$2, 040, 000
Non-Federal.....	450, 000
Total.....	2, 490, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$59, 600	\$15, 800	\$75, 400
Maintenance and operation.....		5, 000	5, 000
Total.....	59, 600	20, 800	80, 400
Annual benefits:			
Damages prevented.....			101, 100
Land enhancement.....			7, 000
Total.....			108, 100

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Furnish all lands, easements, and rights-of-way; hold and save the United States free from damages; make alterations to existing improvements, other than railroads; prevent encroachment on the diversion channel; prevent encroachment in existing drainage channels within the city; maintain and operate the works, except for the opening under the Holloman railroad spur. Local interests indicated they are willing and able to comply with these requirements.

*Comments of the State and Federal agencies.*—

Department of Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of New Mexico: Favorable



*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—Alamogordo is a trading center for an area which includes the military installations at the White Sands Missile Base and Holloman Air Force Base. The recommended improvement would reduce the annual flood damages in an urban area with a population of more than 20,000, and permit increased utilization of some land in the protected area. The committee considers this project economically justified and recommends its adoption.

# RIO GRANDE AND TRIBUTARIES, LAS CRUCES, N. MEX.

(S. Doc. 117, 87th Cong.)

*Location.*—Las Cruces is on the east side of the Rio Grande in south-central New Mexico about 45 miles northwest of El Paso, Tex.

*Authority.*—Resolution by the Senate Public Works Committee, adopted July 20, 1954.

*Existing project.*—No specific Federal flood control project for Las Cruces. The existing Caballo Reservoir on the Rio Grande about 60 miles upstream, constructed by the Bureau of Reclamation and the channel and levee improvements on the mainstem of the Rio Grande constructed by the International Boundary and Water Commission, provide flood protection to agricultural land in Mesilla Valley including Las Cruces. Also, the Soil Conservation Service has constructed detention dams well upstream on arroyos entering Las Cruces.

*Flood problem.*—Storm runoff from the mountains east of Las Cruces debauches onto the valley where it spreads and is trapped by man-made obstructions and natural depressions, particularly in Las Cruces, until it finds outlets over the highly developed valley floor.

*Recommended plan of improvement.*—One large detention reservoir about 3 miles long and 69 feet high with a capacity of 12,500 acre-feet near the eastern edge of the city, together with an outlet channel to the Rio Grande, and a small detention dam with a capacity of nearly 170 acre-feet on Campus Arroyo to protect the university.

*Estimated cost (price level of July 1960).*—

Federal.....	\$3, 350, 000
Non-Federal.....	536, 000
<b>Total.....</b>	<b>3, 886, 000</b>

## Project economics.—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$123, 900	\$25, 700	\$149, 600
Maintenance and operation.....		8, 600	8, 600
<b>Total.....</b>	<b>123, 900</b>	<b>34, 300</b>	<b>158, 200</b>
<b>Annual benefits:</b>			
Damages prevented.....			215, 500
Land enhancement.....			7, 800
<b>Total.....</b>			<b>223, 300</b>

*Benefit-cost ratio.*—1.4.

*Local cooperation.*—Furnish all lands, easements, and rights-of-way; hold and save the United States free from damages; maintain and operate after completion, make alteration to existing improvements, except railroads; prevent encroachment upon the outlet channel from Las Cruces Dam to maintain a capacity of 275 cubic feet per second; prevent encroachment on the existing capacity of Campus Arroyo from Campus Dam to the sewage disposal plant; and prevent encroachment, other than natural sediment deposit, on the reservoir storage capacity. Local interests have indicated their willingness and ability to meet these requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Federal Power Commission: Favorable.

Public Health Service: Favorable.

International Boundary and Water Commission: Favorable.

State of New Mexico: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee is cognizant of the nature of the flood problem at Las Cruces and the flashy nature of the flows that originate in the Organ Mountains to the east. The proposed detention dams on Las Cruces, Alameda, and Campus Arroyo would prevent most of the flood damages in the city. The project is considered to be needed and justified on the basis of existing policy with respect to cost allocation between the Federal Government and local interests.

#### CITY OF RUSSELLVILLE, ARK.

(Sewage treatment facilities)

*Location.*—The city of Russellville is located about 5 miles northeast of the Dardanelle lock and dam.

*Existing facilities.*—The city maintains and operates a primary sewage treatment plant northwest of the developed city area. The plant was constructed in 1951 and 1952 and is designed for an average daily flow of 1,590,000 gallons. Normally, the primary effluent flows by gravity outfall line into Prairie Creek west of the treatment plant. However, during times of high water it is necessary to pump the effluent. During dry seasons the only flow in Prairie Creek near its mouth is the primary sewage effluent which results in a nuisance and a health hazard. Prairie Creek empties into Illinois Bayou, a tributary of the Arkansas River. The treatment plant is overloaded and operational difficulties cause it to be out of service for extended periods. Because of these conditions the city, prior to the present time, has considered expansion of its present sewage collection system to handle present population needs more adequately.

*Existing flood conditions.*—The low area northwest of the city and bordering the city property are subject to frequent flooding from Illinois Bayou under natural conditions. Also, flooding in the downtown area caused by rapid runoff from the Prairie Creek watershed in an inadequate channel has resulted in extensive damages in the past. The flood of August 1957 occurred during low stages of the



Illinois Bayou and, therefore, was a direct result of Prairie Creek runoff and caused damages estimated at \$140,000. With Dardanelle Dam in operation and reservoir level at 338 mean sea level (top of power pool), and without a protective dike, a portion of the city of Russellville (including a portion of the Arkansas Polytechnic College campus) would be permanently flooded.

*Position of the city.*—The city has requested a plan consisting of a lift station, pressure and outfall lines to divert the sewage to new treatment facilities to be constructed southeast of the city which would empty into the Arkansas River below the Dardanelle Dam. The total estimated cost of these new facilities is \$1,803,913.

*Current status.*—Under plans investigated by the Corps of Engineers for protection of the city and disposal of storm water and sewage effluent, a dike is proposed near Illinois Bayou. The dike would be about 6,000 feet long with a maximum height of about 40 feet and crown elevation varying from 347.5 to 350.6 mean sea level. This dike would protect the low portions of the city and adjacent low areas from flooding due to the Dardanelle Reservoir. The dike would block the flow of Prairie Creek permanently and prevent storm water and sewage effluent from discharging by gravity flow into Illinois Bayou and the reservoir. Regardless of the method of disposal of the sewage plant effluent, discharge of storm water over the dike by pumping would be required. Various plans for disposing of the storm runoff and sewage effluent have been studied by the Corps of Engineers. Each plan requires a sump storage area for ponding storm runoff.

*Remarks.*—The committee is aware that a portion of the city of Russellville is to be protected from pool levels of Dardanelle Reservoir by a dike. The existing sewage facilities of the city of Russellville will be damaged by construction of the dike. The committee has included provisions in the bill providing a sewage outfall system for the city of Russellville. It is believed that this is equitable.

The total estimated cost is \$1,804,000, the local cost \$404,000, leaving the Federal cost as \$1,400,000.

#### ARKANSAS RIVER BANK EROSION NEAR WYBARK AND COWETA, OKLA.

This item would provide for a survey of a bank erosion problem at two sites along the Arkansas River and Muskogee and Wagoner Counties, Okla. One site, referred to as the Wybark site, is about 3 miles north of the city of Muskogee and about 45 miles southeast of Tulsa. The other, referred to as the Coweta site, is about 2 miles south of that town and about 25 miles southeast of Tulsa.

At the Wybark site bank caving has occurred along the left bank of the Arkansas River upstream from a point where the Missouri-Kansas-Texas Railway bridge crosses the river. Along this reach the Arkansas River parallels the main line of the railway for a distance of more than a mile. In the affected area the river bank was about 600 feet from the railway in 1958. Today the bank is within 300 feet of the railway. Continued erosion can be expected. There is a threat of breaking not only the Missouri-Kansas-Texas Railway but also the Kansas-Oklahoma & Gulf Railway and Oklahoma State Highway No. 16, both immediately adjacent, unless action is taken to correct the problem. The consequence of breaching the transpor-



tation facilities would entail expenditure of major sums of money for construction of new bridges and approaches as well as lost time and expense for detours and rerouting traffic. There is also a problem of erosion along the right bank of the Arkansas River downstream from the bridge site for a distance of more than 1 mile. Along this reach there is a threat to a powerline and a railroad spur.

The committee is cognizant of the problems associated with bank erosion in this area and urges the Chief of Engineers to expedite the studies.

#### VERDIGRIS RIVER AND TRIBUTARIES, OKLAHOMA AND KANSAS

(H. Doc. 563, 87th Cong.)

*Location.*—The Verdigris River Basin is in southeastern Kansas and northeastern Oklahoma. It has a drainage area of 8,300 square miles. The main stream rises near Emporia, Kans., and courses southward about 350 miles to its confluence with the Arkansas River near Muskogee, Okla.

*Authority.*—Resolutions, Committee on Flood Control, House of Representatives, adopted April 23, 1942; Committee on Public Works, U.S. Senate, adopted May 25, 1960; also an item in the 1958 Flood Control Act.

#### *Existing projects.*—

Unit	Stream	Purpose	Status
Toronto Reservoir, Kans.-----	Verdigris River...	Flood control-conservation.	Completed.
Fall River Reservoir, Kans.-----	Fall River.....	do.....	Do.
Neodesha Reservoir, Kans.-----	Verdigris River...	Flood control.....	Not started.
Elk City Reservoir, Kans.-----	Elk River.....	Flood control-conservation.	Under construction.
Oologah Reservoir, Okla.-----	Verdigris River...	( <sup>1</sup> )	Do.
Hulah Reservoir, Okla.-----	Caney River.....	Flood control-conservation.	Completed.
Lock and dam 19, Okla.-----	Verdigris River...	Navigation.....	Not started.
Lock and dam 18, Okla.-----	do.....	do.....	Do.
Lock and dam 17, Okla.-----	do.....	do.....	Do.

<sup>1</sup> Flood control, power, navigation, and water supply.

*Problems.*—The Verdigris River is a major source of flooding along the Arkansas River in eastern Oklahoma and in Arkansas. During the 38-year period, 1922–60, 56 storms occurred over the Verdigris River Basin and 58 occurred over the Caney River-Bird Creek tributary basins. In addition, storms covering smaller areas have added to these occurrences along the tributaries to the extent that, even with the authorized reservoirs operating, flooding is expected to occur on the average of one or more times per year in the lower Caney River, the Verdigris River downstream from Caney River, and in the Bird Creek Basin. The flood plains along these streams downstream from the existing and proposed dam sites comprise 180,200 acres of rural lands, and 320 acres of urban lands in Oklahoma at Bartlesville, Avant, Skiatook, and the suburban area of Tulsa. Value of property in the flood plain is estimated at \$87 million in rural areas and \$30 million in urban areas; annual crop values are estimated at \$3.8 million. Average annual damages in the basin, excluding headwater

areas, are estimated at \$4.8 million, of which about \$3 million would be prevented by the authorized reservoirs and the proposed Big Hill Reservoir, and about \$1.7 million of the remainder occurs in the study area. These damages are distributed as follows: \$437,000 along Caney River below Hulah Reservoir, \$408,000 along Verdigris River below Caney River, and \$861,000 in the Bird Creek Basin. Because large supplies of ground water are lacking and existing sources are highly mineralized, attainment of supplies of suitable quantity and quality in the Verdigris River Basin is dependent upon surface sources in the tributary streams. The U.S. Public Health Services has made a study and prepared a report on the municipal and industrial water usage and future needs, as well as the pollution problem and water-quality control needs, in the lower Verdigris River Basin. The report indicates that the projected water supply needs in the lower Verdigris River Basin will far exceed the amount which can be provided from existing, authorized, and proposed reservoirs in the area. The report also indicates that, because oilfield operations have built up the chloride concentration of streams in the area, and because standard treatment of domestic and industrial wastes cannot prevent degradation of the quality of receiving streams, storage for stream-quality in amounts equal to that provided for municipal and industrial water supply should be included in any reservoirs planned in the area.

*Recommended plan of improvement.*—Plan consists of five multi-purpose reservoirs on tributaries to the Verdigris River, all for purposes of flood control, water supply, water quality control, recreation, and fish and wildlife, as follows: Copan on Caney Creek, Sand on Sand Creek, Skiatook on Hominy Creek, Birch on Birch Creek, Candy on Candy Creek.

*Estimated cost (1961 prices).*—

	Copan	Sand	Skiatook	Birch	Candy	Total
Federal.....	\$25,578,000	\$6,117,000	\$22,875,000	\$3,245,000	\$4,585,000	\$62,400,000
Non-Federal.....	(1)	(1)	(1)	(1)	(1)	(1)
Total.....	25,578,000	6,117,000	22,875,000	3,245,000	4,585,000	62,400,000

<sup>1</sup> Non-Federal interests to reimburse the United States for construction costs allocated to water supply, such amounts currently estimated as follows: Copan, \$688,000; Sand, \$1,570,000; Skiatook, \$4,278,000; Birch, \$428,000; Candy, \$590,000; total, \$7,554,000.

### *Project economics.*—

Item	Reservoir					
	Copan	Sand	Skiatook	Birch	Candy	Total
Annual charges:						
Interest and amortization.....	\$767,300	\$178,800	\$682,800	\$94,500	\$133,600	\$1,857,000
Operation, maintenance, replacement.....	89,700	55,900	93,200	40,300	50,900	330,000
Total.....	857,000	234,700	776,000	134,800	184,500	2,187,000
Annual benefits:						
Flood control.....	1,279,000	385,000	861,000	472,000	357,000	3,354,000
Conservation.....	66,000	133,000	424,000	46,000	63,000	732,000
Recreation.....	123,000	81,000	168,000	41,000	41,000	454,000
Fish and wildlife.....	66,000	45,000	77,000	22,000	23,000	233,000
Total.....	1,534,000	644,000	1,530,000	581,000	484,000	4,773,000
Benefit-cost ratio.....	1.8	2.7	2.0	4.3	2.6	2.2

*Local cooperation.*—Bear all costs allocated to water supply in accordance with the Water Supply Act of 1958, as amended; hold and save the United States free from water rights claims.

*Comments of States and Federal agencies.*—

Department of the Interior: Recommend acquisition of additional lands for fish and wildlife purposes.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Oklahoma: Favorable.

State of Kansas: Favorable.

*Comments of the Bureau of the Budget.*—No objection to submission of the report to the Congress.

*Remarks.*—The five reservoirs in this project are very well justified, with benefit-cost ratios ranging from 1.8 to 4.3. The multiple-purpose reservoirs will yield badly needed water supplies, provide necessary flood control, and will provide excellent recreational facilities of the general and fish and wildlife varieties. The project fits into and is an essential element of the overall development of the Arkansas River Basin.

#### BIG HILL CREEK, KANS.

(H. Doc. 577, 87th Cong.)

*Location.*—Big Hill Creek, with a drainage area of 110 square miles, is a tributary of the Verdigris River in southeast Kansas.

*Authority.*—Resolution, House Public Works Committee, adopted July 29, 1955.

*Existing project.*—None in Big Hill Creek Watershed. A system of 6 reservoirs for flood control and other purposes is authorized in the Verdigris River Basin.

*Problems.*—Floods and drought have adverse effects on the economy of the area; 1948 flood covered 10,500 acres, and a recurrence would cause an estimated \$350,000 in damages. Average annual damages \$68,000. There is a need in the area for new firm supplies of municipal and industrial water.

*Recommended improvement.*—A reservoir of about 30,700 acre-feet capacity on Big Hill Creek for flood control, water supply, and fish and wildlife and other recreation.

*Estimated cost (1960 prices).*—

Federal	-----	\$3, 785, 000
Non-Federal	-----	( <sup>1</sup> )
Total	-----	3, 785, 000

<sup>1</sup> Local interests to reimburse the United States the entire construction cost allocated to water supply, currently estimated at \$1,263,000. Thus, the estimated net construction cost to the United States is \$2,522,000.



*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$94, 500	<sup>1</sup> \$47, 200	\$141, 700
Maintenance and operation.....	20, 200	<sup>1</sup> 6, 100	26, 300
Total.....	114, 700	53, 300	168, 000
Annual benefits:			
Flood control.....			92, 000
Water supply.....			79, 000
General recreation.....			36, 500
Fish and wildlife recreation.....			27, 000
Total.....			234, 500

<sup>1</sup> Estimated on basis of cost allocated to water supply.

*Benefit-cost ratio.—1.4.*

*Local cooperation.*—Bear all costs allocated to water supply in accordance with Water Supply Act of 1958, as amended, such costs currently estimated at \$1,263,000 for construction and \$6,100 annually for maintenance, operation, and replacements; hold and save United States free from water rights claims. Local interests agree.

*Comments of States and Federal agencies.—*

Department of the Interior: Recommend certain project lands and additional lands be made available to fish and wildlife agencies for management.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Believe consideration should be given to storage for water quality control.

Federal Power Commission: Favorable.

State of Kansas: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau notes that no allowance was made in preauthorization planning for water quality control storage in Big Hill Creek Reservoir. The Bureau recommends that, if the project is authorized as proposed, consideration should be given to additional water supply storage needs during preconstruction planning.

*Remarks.*—This project would provide flood control and water conservation in an area characterized by intermittent flooding and droughts. Also, it would provide a means for recreation and fish and wildlife development in the area. The project is amply justified, has strong local support, and would serve as a needed element in the overall water resources development of the Verdigris River Basin.

## KAW RESERVOIR, ARKANSAS RIVER, OKLA.

(S. Doc. 143, 87th Cong.)

*Location.*—Kaw Reservoir would be located on the main stem of the Arkansas River in north-central Oklahoma.

*Authority.*—Resolution, Senate Committee on Public Works, adopted February 21, 1958.

*Existing project.*—The water resources of the Arkansas River Basin are being extensively developed for flood control, navigation, and other purposes. These developments lie generally downstream and east of

the Kaw damsite. The navigation project provides for a 9-foot channel up the Arkansas and Verdigris Rivers to the vicinity of Catoosa, Okla. The Keystone Reservoir, a major multiple-purpose project for flood control, navigation, and other purposes, is under construction about 115 miles downstream of the Kaw damsite. The existing Great Salt Plains Reservoir, on the Salt Fork of Arkansas River, provides 292,000 acre-feet of storage for flood control, sediment reserve, recreation, and wildlife. This major tributary enters the Arkansas River about 16 miles downstream from the Kaw damsite.

*Problems.*—The principal water-resource problems of the area are the need for control of floods and for increased dependable supplies of domestic and industrial water of good quality. At present the flood plain downstream of the Kaw damsite is predominantly rural; however, it includes 130 acres of urban lands at Ponca City. It is anticipated that urban development in the flood plain will increase considerably, resulting in substantially greater urban flood damages. Floods have occurred about once a year in the vicinity of Ponca City and major floods occurred in 1923, 1926, 1944, 1945, 1951, and 1957. The maximum flood of record was that of June 1923 which had a peak discharge estimated at 165,000 cubic feet per second at the Kaw damsite. A recurrence of a flood of this magnitude would cause damages of \$2,369,000 in the reach from the damsite to Keystone Reservoir. The total average annual flood damages in this reach under existing conditions are estimated at \$433,000.

*Recommended plan of improvement.*—Kaw Reservoir to provide storage for flood control, municipal, and industrial water supply, water quality control, and other conservation uses, including recreation and fish and wildlife enhancement.

*Estimated cost (price level of 1961).*—

Federal.....	\$83, 230, 000
Non-Federal.....	( <sup>1</sup> )
Total.....	83, 230, 000

<sup>1</sup> Local interests to reimburse the United States the entire construction cost allocated to water supply, currently estimated at \$13,500,00.

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$2, 133, 700	\$415, 000	\$2, 548, 700
Maintenance, operations, and replacements.....	152, 300	27, 000	179, 300
Total.....	2, 286, 000	442, 000	2, 728, 000
<b>Annual benefits:</b>			
Damages prevented.....			1, 128, 000
Increased land use.....			305, 000
Reduced sediment in Keystone Reservoir.....			80, 000
Conservation.....			1, 370, 000
Recreation.....			887, 000
Fish and wildlife.....			216, 000
Total.....			3, 986, 000

*Benefit-cost ratio.*—1.5.

*Local cooperation.*—Local interests would be required to reimburse the United States, in accordance with the Water Supply Act of 1958,



as amended, for the costs allocated to municipal and industrial water supply and the annual operation and maintenance costs chargeable to water-supply storage. These costs are presently estimated to be in the magnitude of \$13,500,000 and \$27,000, respectively.

*Comments of the States and Federal agencies.—*

Department of Interior: Favorable.

Department of Commerce: Favorable.

Department of Agriculture: Comment that a net loss to agricultural production would result from project.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Oklahoma: Favorable.

State of Kansas: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget believes that pollution abatement measures are vital to the suitability of Arkansas River waters for projected uses, and, that there is uncertainty at this time of the extent of future needs for water supply and water quality control storage in the proposed Kaw Reservoir. Accordingly, the Bureau states that any request for funds to initiate construction of the project, if authorized by the Congress, should be accompanied by the results of a detailed review of the need and usefulness of storage for these purposes.

The Bureau of the Budget recommends that the decision on establishment of a national wildlife refuge in conjunction with the reservoir project be deferred until: an adequate long-range plan for the refuge system is developed which will permit a meaningful evaluation of the contribution of the proposed refuge to the purposes of the national wildlife refuge system; means are developed for financing refuge land acquisitions related to water resources projects in a way which will assure the advantages of unified financing of the total refuge land acquisition program; and, there has been opportunity for further consideration of local views with respect to establishment of the refuge.

The Bureau of the Budget advises that, subject to consideration of its foregoing comments, there would be no objection to submission of the report to the Congress.

*Action by the Secretary of the Army.*—Concurs with the Bureau of the Budget.

*Remarks.*—This project would serve many useful and valuable purposes and would yield annual benefits totaling nearly \$4 million. In addition to the evaluated benefits, the project can be expected to aid in alleviating serious water pollution problems in the Arkansas River. Such possible future benefits, while currently unevaluated, indicate further justification of the project. It is noted that the Secretary of the Army concurs with the Bureau of the Budget that the decision on establishment of a national wildlife refuge in conjunction with the reservoir project should be deferred.

The committee has approved the Kaw Reservoir project in Oklahoma. However, in reviewing the report of the Chief of Engineers, it is noted that there is a proposal for the acquisition of land for establishment of a national wildlife refuge at the reservoir. Since long range plans for the development of national wildlife refuges at reservoirs have not been completed, it is the recommendation of the committee that no land be acquired for such purposes at this time.



## COW CREEK, KANS.

(H. Doc. 531, 87th Cong.)

*Location.*—Cow Creek is located in central Kansas and it enters the Arkansas River near Hutchinson, Kans.

*Authority.*—Resolution of the House Committee on Public Works, adopted June 3, 1959.

*Existing project.*—No flood control project for Cow Creek. A local flood protection project at Hutchinson, Kans., provides for diversion of Cow Creek flood flows to the Arkansas River around the north side of the city.

*Flood problem.*—More than 30 miles of the channel are extremely crooked and obstructed by trees and brush. Flooding of agricultural land starts when streamflows exceed 800 cubic feet per second. The flood plain area consists of about 24,600 acres of which more than 95 percent is under cultivation.

*Recommended plan of improvement.*—The plan consists of straightening, snagging, clearing, and deepening the existing channel, beginning at a point on Cow Creek about 2 miles upstream from the Kansas Highway No. 14 Bridge and extending downstream about 33 miles to the diversion channel of the existing Hutchinson flood control project. Two dikes and two lateral ditches would be provided to intercept flows and divert them from Santa Fe Slough to Cow Creek. Where necessary outlet structures will be provided as well as alterations to highway bridges and one railroad bridge.

*Estimated cost (price level of January 1961).*—

Federal.....	\$1, 560, 000
Non-Federal.....	1, 058, 000
Total.....	2, 618, 000

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$58, 000	\$41, 100	\$99, 100
Maintenance and operation.....		9, 800	9, 800
<b>Total.....</b>	<b>58, 000</b>	<b>50, 900</b>	<b>108, 900</b>
<b>Annual benefits:</b>			
Damages prevented.....			247, 000
Land enhancement.....			12, 000
<b>Total.....</b>			<b>259, 000</b>

*Benefit-cost ratio.*—2.4.

*Local cooperation.*—Furnish lands, easements, and rights-of-way; hold and save the United States free from damages; make alterations to highways, highway bridges, utilities, and related facilities, except railroad bridges; maintain and operate; prevent encroachment on the improved channel; inform individuals concerned, annually, that project will not protect against major floods. Local interests have indicated their willingness and ability to meet these requirements.

*Comments of the State and Federal agencies.—*

Department of the Interior: Commented concerning certain recommendations made by the Fish and Wildlife Service which were not adopted as part of the recommended plan.

Department of Commerce: Favorable.

State of Kansas: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.*—The committee believes the proposed improvement will provide urgently needed flood protection to a large agricultural area, improve drainage conditions, and decrease the time of flooding due to the larger floods. Also, it has been noted that the project will permit the conversion of idle land and pasture to a higher order of agricultural use. The relatively high economic ratio of the project has been noted, and the committee considers its authorization to be justified.

## ARKANSAS RIVER, DODGE CITY, KANS.

(H. Doc. No. 498, 87th Cong.)

*Location.*—Dodge City is located on the Arkansas River, in southwestern Kansas.

*Authority.*—Resolution of the House Committee on Flood Control, adopted July 2, 1943.

*Existing project.*—No Federal flood-control project at Dodge City. Local interests have constructed low levees and some channel improvements.

*Flood problem.*—Flooding occurs when streamflows in the Arkansas River exceed the present channel capacity of about 7,000 cubic feet per second. Intense storm runoff in the basin below John Martin Dam, 188 miles upstream, presents a serious threat to the city.

*Recommended plan of improvement.*—The construction of 6.9 miles of levees and floodwalls with appurtenant bank protection together with 1.75 miles of channel enlargement on the Arkansas River; replacement of the existing railroad bridge; interior drainage facilities consisting of ditches, outlet structures, a storm sewer, and ponding areas; and construction of a pumping plant to replace the existing sewerage treatment plant outlet.

*Estimated cost (price level of July 1691).—*

Federal.....	\$2, 133, 000
Non-Federal.....	323, 000
Total.....	2, 456, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$77, 900	\$18, 000	\$95, 900
Maintenance and operation.....		5, 200	5, 200
Total.....	77, 900	23, 200	101, 100
Annual benefits:			
Damages prevented.....			163, 900
Land enhancement.....			5, 500
Total.....			169, 400

*Benefit-cost ratio.—*1.7.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project, including easements required for flood-zoning purposes in the ponding areas; hold and save the United States free from damages due to the construction works and free from claims as a result of flooding from residual interior drainage during operation of the project; make any alterations to existing improvements other than the railroad, that may be required by the construction works, including the provision of a sewage pumping plant; maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; inform periodically all concerned, in a manner satisfactory to the Secretary of the Army, that some flooding will continue to occur because of temporary ponding; and prohibit encroachment on the capacities of the interior drains and ponding areas and the flood-carrying capacity of the improved river channel, and if ponding areas and capacities are impaired, provide promptly, without cost to the United States, substitute storage or equivalent pumping capacity. Local interests have indicated their willingness and ability to meet these requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Public Health Service: Favorable.

State of Kansas: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee recognizes that the existing John Martin Dam in Colorado reduces flood peaks at the city but that river overflows have resulted from severe storms over the watershed below the dam. The plan of improvement would provide for the safe passage of flows two times greater than the maximum of record and would provide a well justified degree of protection.

#### VILLAGE CREEK, JACKSON, AND LAWRENCE COUNTIES, ARK.

(H. Doc. 352, 87th Cong.)

*Location.*—Village Creek rises in Randolph County in northeastern Arkansas and flows generally southwestward through Jackson and Lawrence Counties and joins the White River near Newport, about 80 miles northeast from Little Rock.

*Authority.*—Resolution of the Committee on Public Works, House of Representatives, adopted October 16, 1951.

*Existing improvements.*—No Federal projects specifically for flood control in Village Creek Basin. However, reservoir and levee projects in the nearby White River and Black River basins provide some flood protection by preventing overflow into Village Creek basin. Improvements by local interests consist of excavation of drainage ditches on tributaries and along the main stem of Village Creek.

*Flood problem.*—Frequent flooding of agricultural lands results in serious damages to crops. Flooding results from intense local storms of short duration and from general storms extending over longer



periods. The flat land and stream slopes, inadequate channels, and large valley storage cause storm runoff to concentrate slowly in the main stem with prolonged flooding of large areas.

*Recommended plan of improvement.*—Channel enlargement, straightening and clearing on Village Creek, from the mouth upstream a total distance of 61 miles, together with adequate on-farm and group lateral drainage facilities.

*Estimated cost (price level of January 1960).—*

Federal.....	\$1, 968, 000
Non-Federal.....	2, 165, 000
<b>Total.....</b>	<b>4, 133, 000</b>

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$72, 400	\$91, 300	\$163, 700
Maintenance, operation, and replacement.....		45, 300	45, 300
Loss of production.....		2, 300	2, 300
<b>Total.....</b>	<b>72, 400</b>	<b>138, 900</b>	<b>211, 300</b>
<b>Annual benefits:</b>			
Damages prevented.....			74, 300
Improved drainage.....			379, 900
<b>Total.....</b>			<b>454, 200</b>

*Benefit-cost ratio.*—2.1.

*Local cooperation.*—Contribute in cash 30.7 percent of the actual Federal construction cost, presently estimated at \$871,000; furnish all lands, easements, and rights-of-way; make alterations to existing improvements, except railroad facilities; hold and save the United States free from damages; prohibit encroachments on improved channel; construct and maintain on-farm and lateral drainage facilities; and maintain the improved creek channel. Local interests have indicated they are willing and able to comply with these requirements.

*Comments of State and Federal agencies.—*

Department of Agriculture: Favorable.

Department of the Interior: Commented that the recommended plan would result in an annual loss to fish and wildlife resources but proposed no specific plan for mitigating such losses.

Public Health Service: Favorable.

State of Arkansas: Concurred in the recommendation; however, noted that the local costs appeared to be excessive.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—This worthy flood control and drainage project is well justified with a benefit-cost ratio of 2.1. The willingness of local interests to bear the sizable percentage of the construction cost indicates the strong local desire and urgency for the project.

VILLAGE CREEK, WHITE RIVER, AND MAYBERRY LEVEE DISTRICTS, RESTUDY  
OF PLAN III

(H. Doc. 577, 87th Cong.)

*Location.*—Along the left bank of the White River in northeast Arkansas.

*Authority.*—Flood Control Act of 1960 (Public Law 86-645).

*Existing project.*—The Flood Control Act of 1936 authorized construction of a number of local control improvements, consisting mainly of raising, enlarging, and connecting existing levees. The Flood Control Act of 1960 authorized improvements within the Village Creek, White River, and Mayberry Levee Districts to provide for clearing and snagging 14.7 miles of old channels and constructing 10.6 miles of new channels, together with certain facilities for mitigation of fish and wildlife losses, at an estimated Federal cost of \$294,000, subject to local cooperation. (The authorized plan is referred to as plan I.)

*Flood problem.*—About 21,340 acres of wooded, cleared, and cultivated land are subject to flooding, ponding due to interior runoff, and poor drainage. Authorized plan I would benefit about 18,400 acres.

*Recommended plan of improvement.*—Construction of a pumping plant with a capacity of 300,000 gallons per minute at the Taylor Slough outlet, as an element of the authorized flood control and drainage plan.

*Estimated cost (price level of spring 1961).—*

Federal.....	<sup>1</sup> \$1, 018, 000
Non-Federal.....	<sup>1</sup> 29, 000
Total.....	1, 047, 000

<sup>1</sup> Increase in cost over cost of authorized plan I.

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges: <sup>1</sup>			
Interest and amortization.....	\$36, 830	\$2, 630	\$39, 460
Maintenance and operation.....		16, 680	16, 680
Total.....	36, 830	19, 310	56, 140
Annual benefits: <sup>2</sup>			
Damages prevented.....			85, 100
Increased land use.....			59, 140
Total.....			144, 240

<sup>1</sup> Increase in cost over cost of authorized plan I.

<sup>2</sup> Increase in benefits over benefits of authorized plan I.

*Benefit-cost ratio.*—2.6.

*Local cooperation.*—Contribute in cash 17.2 percent of the Federal construction cost of the pumping plant, an amount currently estimated at \$211,000; provide lands, easements, and rights-of-way; effect necessary relocations; hold and save the United States free from damages; maintain and operate the project as prescribed and at their own expense, and other items as specified in authorized plan I.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture.

Department of Health, Education, and Welfare: Favorable.

State of Arkansas: Noted the requirement for a cash contribution of \$211,000 and believed it desirable to review again the requirements for a cash contribution.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee is pleased to note that further study of the project authorized in the Flood Control Act of 1960 has shown that the addition of a pumping plant is so well justified and such a desirable element in the plan for flood protection in the area. The committee believes this is a meritorious project and therefore recommends its adoption.

RED RIVER, TEX., OKLA., ARK., AND LA., BELOW DENISON DAM, TEX, AND OKLA.

Language is included which would authorize the Chief of Engineers to adjust the local cooperation requirements of the McKinney Bayou, Ark. and Tex., the Maniece Bayou, Ark., and East Point, La., projects.

The committee believes that such a review is appropriate, in order to determine the equity of the allocations of cost which were made when the projects were authorized in the Flood Control Act of 1960.

LAKE KEMP, WICHITA RIVER, TEX.

(S. Doc. 144, 87th Cong.)

*Location.*—Wichita River is a south bank tributary of the Red River in north-central Texas. Lake Kemp is located on the Wichita River about 70 miles upstream from the city of Wichita Falls.

*Authority.*—Resolution, Senate Committee on Public Works, adopted April 16, 1959.

*Existing project.*—There are no existing or authorized flood control projects in the Wichita Basin. Lake Kemp, with a capacity of 462,000 acre-feet, was constructed by local interests in 1923 for conservation purposes.

*Flood problem.*—Problem is mainly the disastrous threat to the city of Wichita Falls posed by the deteriorated Lake Kemp Dam. Average annual damages in absence of Lake Kemp would be about \$1 million.

*Recommended plan of improvement.*—Modification of existing Lake Kemp project by replacement of the existing outlet works and spillway with a new combined structure, raising the height of the dam about 3 feet, and strengthening the embankment, to provide 526,000 acre-feet of storage, of which 200,000 acre-feet would be for flood control.

*Estimated cost (price level of July 1960).*—

Federal.....	\$6, 410, 000
Non-Federal .....	<sup>1</sup> 2, 203, 000
Total.....	8, 613, 000

<sup>1</sup> Includes cash contribution currently estimated at \$1,885,000.



*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$236, 500	\$227, 400	\$463, 900
Maintenance and operation.....	45, 900	33, 700	79, 600
Total.....	282, 400	261, 100	543, 500
Annual benefits:			
Damages prevented.....			730, 000
Conservation.....			649, 000
Total.....			1, 379, 000

*Benefit-cost ratio.*—2.5.

*Local cooperation.*—(a) Retain ownership and operate and maintain the project for a minimum period of 50 years after completion; (b) maintain the project and operate the flood-control features in accordance with regulations prescribed by the Secretary of the Army; (c) Accomplish without cost to the United States all relocations and alterations of existing buildings, highways, bridges, sewers, and related and special facilities; (d) hold and save the United States free from damages due to the construction works; (e) provide without cost to the United States all lands, easements, and rights-of-way necessary for the construction of the project; (f) adopt and enforce regulations to preserve the existing capacity of the channel through the city of Wichita Falls and prevent encroachment; (g) adequately inform affected interests annually concerning the probability of residual damages after construction of the modifications; (h) provide free access to the lake in accordance with the principles of section 4 of the Flood Control Act of 1944; and (i) contribute 22.7 percent of the cost for the Federal construction, a contribution presently estimated at \$1,885,000, in equal annual payments, over a period of not more than 50 years beginning at the completion of construction, including interest on the unpaid balance at the rate prescribed at the time of construction for projects of this type.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of Texas: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—This project provides for rehabilitation of an existing dam built by local interests for conservation purposes. The dam is in a deteriorated condition and its failure could result in a catastrophic flood, mainly in the city of Wichita Falls. Flood control is needed in the area, and rehabilitation of existing Lake Kemp provides the most practical and economical means for satisfying that need. The project is well justified with a benefit-cost ratio of 2.5 even without evaluation of recreation benefits which would surely be realized.

## BROKEN BOW RESERVOIR, MOUNTAIN FORK RIVER, OKLA.

(S. Doc. 137, 87th Cong.)

*Location.*—On Mountain Fork River, a tributary of Little River, in southeastern Oklahoma.

*Authority.*—Resolution, Committee on Public Works, U.S. Senate, adopted January 6, 1961.

*Existing project.*—The Broken Bow Reservoir was authorized for flood control and water supply by the Flood Control Act of 1958. Construction has been initiated on the basis that power facilities upon authorization will be installed either initially or in the future. The authorized project is about 5 percent completed.

*Problem.*—The study considers the advisability of providing storage and facilities for generation of hydroelectric power at Broken Bow Reservoir.

*Recommended plan of improvement.*—It is recommended that the project for Broken Bow Reservoir, now authorized for flood control and water supply, be modified to provide for hydroelectric-power facilities in the initial construction and to include fish and wildlife conservation as a project purpose. Gross storage capacity would be increased from 541,100 acre-feet, as authorized, to 1,368,800 acre-feet.

*Estimated cost (price level of March 1961).*—

Federal-----	\$39, 600, 000
Non-Federal-----	( <sup>1</sup> )
Total-----	<sup>2</sup> 39, 600, 000

<sup>1</sup> Non-Federal interests to reimburse the United States for construction costs allocated to water supply, currently estimated at \$2,970,000.

<sup>2</sup> An increase of \$23,800,000 over estimated cost of authorized project.

*Project economics.*—

Annual charges:

Interest and amortization-----	\$1, 181, 900
Maintenance, operation and replacement-----	366, 600
Taxes foregone-----	578, 000
Total-----	2, 126, 500

Annual benefits:

Flood control-----	305, 500
Water supply-----	369, 700
Power-----	1, 959, 000
Recreation-----	750, 000
Fish and wildlife-----	460, 000
Total-----	3, 844, 200

*Benefit-cost ratio.*—1.8.

*Local cooperation.*—Pay the United States in accordance with the Water Supply Act of 1958, as amended, the entire amounts of the construction costs and the operation, maintenance, and replacement costs allocated to water supply, these amounts being presently estimated at \$2,970,000 and \$6,500 annually, respectively, for the project as modified, the final amounts to be determined by allocation after actual construction costs are known.

*Comments of the State and Federal agencies.—*

Department of the Interior: Recommends acquisition of certain additional lands for fish and wildlife purposes.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Oklahoma: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget expects that construction of power features of the Broken Bow Reservoir project, other than penstocks or other provisions for future power installations, not be undertaken until there is specific assurance that all costs including joint costs allocated to power can be returned with interest within a period of 50 years.

The Bureau of the Budget advises that, subject to consideration of the foregoing comment, there is no objection to the submission of the report to the Congress.

*Remarks.*—This project modification would provide for hydro-electric power facilities in the initial construction of the authorized project, and would include fish and wildlife conservation as a project purpose. The estimated increase in cost over the cost of the authorized project is \$23,800,000. Local interests would bear \$2,970,000 for water supply under the provisions of the Water Supply Act of 1958, as amended. The committee notes that initial installation of power facilities would result in a saving of \$2,900,000 in construction cost, and concurs that such installation should not be deferred.

**CLAYTON, TUSKAHOMA, AND HUGO RESERVOIRS, KIAMICHI RIVER, OKLA.**

(S. Doc. 145, 87th Cong.)

*Location.*—Kiamichi River is in southeastern Oklahoma, and is a major tributary of the Red River.

*Authority.*—Resolution, Senate Committee on Public Works, adopted January 28, 1955.

*Existing project.*—Hugo Reservoir, with the damsite at mile 20.7 on the Kiamichi River, was authorized for flood control by the Flood Control Act of 1946 as a unit in the Red River below Denison Dam project, but construction has not been initiated.

*Flood problem.*—An average of three floods occur in the basin every year, with major flooding every 2 years. Since 1926, 10 major floods have occurred. Annual flood damages of \$140,000 are estimated to occur along the Kiamichi River below the Tuskahoma damsite, excluding the area within Hugo Reservoir. Flood losses on Red River downstream from the mouth of Kiamichi River are estimated at \$3,700,000 annually, based on present conditions, with Denison Reservoir operating and with levees authorized prior to 1945 in place.

*Recommended plan of improvement.*—The plan of improvement consists of modification of the authorized Hugo Reservoir with the damsite at mile 17.6 on Kiamichi River and the recommended addition of two upstream reservoirs, Clayton and Tuskahoma, to provide for flood control and water conservation, including water supply, recreation, and fish and wildlife uses. The plan retains the degree



of flood protection contemplated by the authorized Red River flood control project below Denison Dam and affords additional flood protection on Kiamichi River. The recommendations of the Chief of Engineers permit discretion regarding the sequence of construction of the authorized Hugo Reservoir and the Recommended Clayton and Tuskahoma Reservoirs. Under the plan the first cost of Hugo Reservoir would be \$23,065,000 compared to \$20,900,000 as now estimated. However, the net cost to the United States would be \$3,487,000 less than the cost as now estimated since local interests would reimburse the United States an amount of \$5,562,000 for water supply storage costs.

*Estimated cost (1960 prices).—*

	Clayton	Tuskahoma	Total
Federal.....	\$13, 174, 000	\$16, 574, 000	\$29, 748, 000
Non-Federal.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Total.....	13, 174, 000	16, 574, 000	29, 748, 000

<sup>1</sup> Bear construction costs allocated to water supply, currently estimated at \$6,221,000 and \$8,042,000 for Clayton and Tuskahoma Reservoirs, respectively.

*Project economics.—*

	Clayton	Tuskahoma	Total
Annual charges:			
Interest and amortization.....	\$502, 090	\$631, 420	\$1, 133, 510
Operation and maintenance, replacement.....	62, 300	73, 600	135, 900
Total.....	564, 390	705, 020	1, 269, 410
Annual benefits:			
Flood control.....	190, 000	238, 000	428, 000
Water supply.....	325, 000	397, 000	722, 000
Recreation.....	96, 000	82, 000	178, 000
Fish and wildlife.....	121, 000	154, 000	275, 000
Total.....	732, 000	871, 000	1, 603, 000
Benefit-cost ratio.....	1.3	1.2	1.3

*Local cooperation.*—Bear all costs allocated to water supply in accordance with the Water Supply Act of 1958, as amended; hold and save the United States free from water rights claims. Local interests are willing to comply.

*Comments of the State and Federal agencies.—*

Department of the Interior: Recommends additional lands for fish and wildlife.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Believe that storage for water quality control can be utilized.

Federal Power Commission: Favorable.

State of Oklahoma: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget notes that the Corps of Engineers will work with the Public Health Service during advance planning of the reservoir projects with a view

to determining the need and justification of storage for water quality control. In this connection, the Bureau indicates that in the event storage for water quality control displaces in whole or in part the currently contemplated water supply storage in the reservoirs and the water quality benefits are determined to be widespread, it would appear that the currently estimated ultimate reimbursements to the United States for water supply would not be realized. The Bureau has no objection to submission of the report to the Congress.

*Remarks.*—This project provides for the construction of Clayton and Tuskahoma Reservoirs, to be operated in conjunction with the authorized Hugo Reservoir, all to serve the needed purposes of flood control, water supply, fish and wildlife, and recreation. Also, it is noted that water quality control is needed in the Red River and that the projects might ultimately be developed to serve that purpose. Local interests would participate by bearing costs allocated to water supply, and as a result, the estimated net cost to the United States for Hugo Reservoir would be less than now envisioned. The committee notes ample justification and support for the recommended projects and heartily endorses the proposal.

#### WATER QUALITY STUDY, ARKANSAS-RED RIVER BASINS

(S. Doc. 105, 87th Cong.)

*Location.*—The Arkansas and Red Rivers and their tributaries drain over 250,000 square miles including all of Oklahoma and parts of Colorado, New Mexico, Kansas, Texas, Mississippi, Arkansas and Louisiana. About 74,500 square miles of the Arkansas River Basin are above Keystone Reservoir and about 39,700 square miles of the Red River Basin are above Denison Dam.

*Authority.*—Resolution, Senate Committee on Public Works, adopted December 16, 1959.

*Existing project.*—There are no existing projects in the area for control of water quality.

*Problem.*—The problem is to locate and measure the sources, establish the importance and types of pollutants entering the Arkansas and Red Rivers, and to develop practical means of controlling them. Studies to date show total daily chloride loads of 10,600 tons for Arkansas River at Keystone Reservoir and 3,800 tons for Red River near Denison Dam. These chloride loads clearly indicate the need for control and management of water quality.

*Recommended plan of improvement.*—Construction of two experimental projects, and performance of tests to determine their effectiveness in improvement of water quality. One project would be located on Prairie Dog Town Fork of Red River near Estelline, Tex.; the other on South Fork of Wichita River near Guthrie, Tex.

*Estimated cost (November 1961 prices).*—

Federal.....	\$300, 000
Non-Federal.....	
Total.....	300, 000



*Project economics.*—

**Annual charges:** The first costs shown in estimated cost include allowances for observations of test results.

**Annual benefits:** It is not yet possible to evaluate benefits in monetary terms. The test results will furnish valuable data and information concerning the possible economical solution of the overall problem on a basin-wide scale.

**Benefit-cost ratio.**—Not evaluated.

**Local cooperation.**—None recommended.

*Comments of States and Federal agencies.*—

State of Oklahoma: Favorable.

State of Kansas: Favorable.

State of Arkansas: Favorable.

State of Texas: Favorable.

State of Louisiana: Favorable.

Department of Interior: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

**Remarks.**—The committee notes that the surface water supply of satisfactory quality for municipal and industrial uses, as well as irrigation, in a rapidly growing section of the country is not available and that the demands for good water will tax the available surface and ground supply. It believes that the proposed improvement will make a significant contribution to the solution of the water problems of this area and with continued study, as recommended, a similar contribution to the solution of like problems in other areas. The committee heartily endorses the recommendations of the Chief of Engineers and urges the authorization of this project.

## KAYSINGER BLUFF RESERVOIR, OSAGE RIVER, MO.

(H. Doc. 578, 87th Cong.)

**Location.**—Kaysinger Bluff Reservoir would be located in west-central Missouri immediately upstream from the existing Lake of the Ozarks, created by Bagnell Dam.

**Authority.**—Resolutions, Senate and House Committees on Public Works, adopted March 25, 1961, and June 7, 1961, respectively.

**Existing project.**—The Kaysinger Bluff project was authorized for flood control by the Flood Control Act of 1954, with a planned total storage capacity of 4,040,000 acre-feet. The reservoir is one of a system of nine authorized reservoirs in the Osage River Basin. Two are under construction, two are under preconstruction planning, two are being restudied, no work is underway on the remaining three.

**Problems.**—The Osage River Basin is subject to damaging floods at any time of year. Also, the river is a major contributor to severe floods which endanger rich farmlands along the Missouri River, the St. Louis industrial area, and lands along the middle and lower Mississippi. There is a need for conservation storage to provide hydroelectric peaking power for integration with fuel generating plants, and to support fish and wildlife, recreation and other uses.



*Recommended plan of improvement.*—Modification of the Kaysinger Bluff Reservoir project to provide for a reservoir with a total storage capacity of about 5,200,000 acre-feet, and with hydroelectric power generating facilities, to serve the primary purposes of flood control, power, fish and wildlife, and recreation.

*Estimated cost (price level of 1961).*—

Federal:	
Existing project.....	\$99, 508, 000
Proposed modification.....	43, 245, 000
Subtotal.....	142, 753, 000
Non-Federal.....	None
Total.....	142, 753, 000

*Project economics.*—

Annual charges (all Federal):	
Interest and amortization.....	\$4, 344, 000
Operation, maintenance, and replacement.....	425, 000
Loss of land productivity.....	494, 000
Taxes foregone.....	49, 000
Total.....	5, 312, 000

Annual benefits:	
Flood control.....	4, 264, 000
Power.....	1, 797, 000
Fish and wildlife.....	500, 000
Recreation.....	800, 000
Total.....	7, 361, 000

*Benefit-cost ratio.*—1.4.

*Local cooperation.*—None required.

*Comments of States and Federal agencies.*—

Department of the Interior: Recommends mineral evaluation in preconstruction planning. Recommends national wildlife refuge as part of project.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Missouri: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget concurs in the need for a reexamination of the financial feasibility of the power features during the design stage, on the basis of power values then appropriate. The Bureau advises that it would expect that construction of power features of the Kaysinger Bluff project, other than penstocks or other provisions for future power installations, not be undertaken until there is specific assurance that all costs including joint costs allocated to power can be returned with interest within a period of 50 years. Also, the Bureau recommends that the decision on establishment of a national wildlife refuge in conjunction with the Kaysinger Bluff Reservoir project be deferred until an adequate long-range plan for the refuge system is developed which will permit a meaningful evaluation of the contribution of the proposed refuge to the purposes of the national wildlife refuge system; and, until means are developed for financing refuge land acquisitions re-

lated to water resources projects in a way which will assure the advantages of unified financing of the total refuge land acquisition program. The Bureau of the Budget also advises that there is no objection to submission of this report to the Congress.

*Action by the Secretary of the Army.*—Concurs with the Bureau of the Budget.

*Remarks.*—This project provides for modification of the authorized flood control project by the addition of a conservation pool for the development of hydroelectric power and for fish and wildlife and recreation uses. The estimated increase in cost over the cost of the authorized project is \$43,245,000. It is noted that the Secretary of the Army concurs in the recommendation of the Bureau of the Budget that the decision on establishment of a national wildlife refuge in conjunction with the reservoir project be deferred.

The committee has approved the Kaysinger Bluff Reservoir project in Missouri. However, in reviewing the report of the Chief of Engineers, it is noted that there is a proposal for the acquisition of land for establishment of a national wildlife refuge at the reservoir. Since long-range plans for the development of national wildlife refuges at reservoirs have not been completed, it is the recommendation of the committee that no land be acquired for such purposes at this time.

#### KANSAS RIVER, KANS., NEBR., AND COLO.

(S. Doc. 122, 87th Cong.)

*Location.*—Kansas River flows generally eastward and drains an area of about 60,000 square miles in eastern Colorado, southern Nebraska, and north-central Kansas. The river enters Missouri River at the Kansas Citys. Improvements recommended in the report are located in eastern Kansas and at the Kansas Citys.

*Authority.*—Resolutions, Senate Committee on Public Works, adopted August 20, 1953, and June 16, 1954.

*Existing projects.*—Completed corps reservoirs in the basin are Kanopolis and Harlan County. Corps reservoirs under construction are Tuttle Creek and Milford. Corps reservoirs authorized but not started are Perry, Wilson, and Pioneer. The corps has 17 local flood protection projects either completed, under construction, or authorized but not started, in the basin. The Bureau of Reclamation has completed eight reservoirs in the basin. The Soil Conservation Service has completed five watershed protection projects. Local interests have completed 250 miles of levees.

*Problems.*—Many severe floods have occurred in the basin. The ravaging 1951 floods resulted in estimated damages of \$725 million. Also, severe droughts have been experienced, indicating the need for water conservation.

*Recommended improvements.*—Four multiple-purpose reservoirs for flood control, water supply, and fish and wildlife, and general recreation. The reservoirs would be located on tributaries to the main Kansas River in the lower, eastern end of the basin, and would range in gross capacity from 157,000 to 384,000 acre-feet. Also recommended are improvements of existing local protection works at the Kansas Citys.

*Estimated cost (September 1960 prices).—*

Item	Federal	Non-Federal	Total
Reservoirs.....	\$70,240,000	( <sup>1</sup> )	\$70,240,000
Local protection works.....	17,830,000	\$3,050,000	20,880,000
Total.....	88,070,000	3,050,000	91,120,000

<sup>1</sup> Local interests to reimburse the United States an amount currently estimated at \$10,919,000 for water supply. Thus, the total net cost to the United States for all recommended work is estimated at \$77,151,000.

*Project economics: Reservoirs.—*

Item	Reservoir				
	Woodbine	Onaga	Grove	Clinton	Total
Annual charges:					
Interest and amortization.....	\$502,000	\$850,000	\$467,000	\$1,023,000	\$2,842,000
Maintenance, operation, and replacement.....	55,000	68,000	64,000	89,000	1,276,000
Total.....	557,000	918,000	531,000	1,112,000	3,118,000
Annual benefits:					
Flood control.....	731,000	1,205,000	509,000	1,026,000	3,471,000
Water supply.....	75,000	270,000	120,000	210,000	675,000
Fish and wildlife recreation.....	27,000	41,000	82,000	107,000	257,000
General recreation.....	141,000	195,000	66,000	201,000	603,000
Total.....	974,000	1,711,000	777,000	1,544,000	5,006,000
Benefit-cost ratio.....	1.7	1.9	1.5	1.4	1.6

<sup>1</sup> Net annual cost to the United States for maintenance, operation, and replacements currently estimated at \$224,500.

*Local protection works.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$645,000	\$142,000	\$787,000
Maintenance, operation, and replacement.....		5,000	5,000
Economic losses.....			11,000
Total.....	645,000	147,000	803,000
Annual benefits: Flood control.....			1,199,000

*Benefit-cost ratio.—1.5.*

*Local cooperation.*—Reservoirs: Prior to construction furnish assurances to make demands for use of water supply storage within a period of time which will permit repayment of costs allocated to water supply within the life of the project, as determined by the Chief of Engineers, in accordance with the Water Supply Act of 1958 as amended by the Water Pollution Control Act Amendments of 1961; hold the United States free from water rights claims; prevent encroachments on capacities of streams below reservoirs necessary for reservoir operation. Local protection works: Furnish necessary lands, easements, rights-of-way; make necessary alterations and relocations of utilities; hold and save the United States free from damages; maintain and operate as prescribed. Responsible local interests have indicated they will comply with the all foregoing requirements.



*Comments of States and Federal agencies.—*

State of Kansas: Favorable. Urge early authorization and construction.

State of Missouri: Favorable.

Department of the Interior: Favorable. Recommend that all joint costs allocated to fish and wildlife be nonreimbursable Federal costs.

Department of Agriculture: Favorable.

Federal Power Commission: Favorable.

Department of Health, Education, and Welfare: Favorable.

Department of Commerce: Favorable.

*Comments of the Bureau of the Budget.*—No objection to transmission of the report to Congress. However, the Bureau of the Budget notes that the Governor of Kansas and the Department of the Interior, in commenting on the proposed report, urged that joint costs allocated to fish and wildlife values be borne entirely by the Federal Government, rather than shared in the manner recommended by the Chief of Engineers; and, that in view of more recent recommendations by the Chief of Engineers on cost-sharing arrangements for fish and wildlife and other recreation in connection with other reservoir projects, consideration might be given this matter before transmitting the report to the Congress.

*Remarks.*—The Secretary of the Army in his letter transmitting the report to Congress, recommended that local interests not be required to reimburse the United States for any portion of the construction costs and annual operation and maintenance costs of the reservoirs allocated to fish and wildlife recreation such portions currently estimated at \$1,221,000 and \$4,200, respectively.

Woodbine Reservoir is a desirable element in the overall basin plan for the Kansas River Basin. However, the remaining three recommended reservoirs would function physically for their intended purposes without Woodbine, and each is economically justified as an individual element.

*Remarks.*—The committee notes that some local opposition to Woodbine Reservoir on Lyons Creek is evidenced. The committee believes that authorization of Woodbine Reservoir should be deferred subject to submission of a new feasibility report by the Chief of Engineers to the 88th Congress, which shall take into account related plans of the Soil Conservation Service, the Kansas Water Resources Board, and Lyons Creek Watershed Joint District No. 41, and preparation of such report should be authorized. Otherwise, the committee endorses at this time the plan of improvement for development of the lower Kansas River Basin.

The committee approves the general plan for flood control as contained in the report of the Chief of Engineers. However, some question has arisen with respect to the best method of obtaining the degree of control which would be accomplished through the construction of the Woodbine Reservoir on Lyons Creek. Therefore, the committee is recommending deferment of this unit until such time as restudy is made to determine if other means can be found to accomplish the desired purpose.

## WHITE CLAY CREEK, ATCHISON, KANS.

(S. Doc. 151, 87th Cong.)

*Location.*—White Clay Creek, which flows through the city of Atchinson, Kans., is a right-bank tributary to the Missouri River.

*Authority.*—Resolution, Senate Committee on Public Works, adopted August 4, 1958.

*Existing project.*—No Federal improvements for flood control only. Soil Conservation Service plan provides for several small detention dams in the basin. Urban renewal program with assistance of Housing and Home Finance Agency was undertaken after flood disaster of 1958.

*Flood problem.*—Average annual damages estimated at \$263,800. 1958 flood caused \$3,600,000 in damages and took three lives.

*Recommended plan of improvement.*—A diversion tunnel to carry floods through the city of Atchison to the Missouri River.

*Estimated cost (1961 prices).*—

Federal.....	\$3, 495, 000
Non-Federal.....	20, 000
Total.....	3, 515, 000

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$99, 600	\$820	\$100, 420
Maintenance, operation, and replacement.....		1, 180	1, 180
Total.....	99, 600	2, 000	101, 600
<b>Annual benefits: Flood damage prevention.....</b>			197, 800

*Benefit-cost ratio.*—1.9.

*Local cooperation.*—Furnish all necessary lands, easements, and rights-of-way; perform all necessary modifications and relocations of utilities; hold and save the United States free from damages; maintain and operate the project. Local interests agree.

*Comments of States and Federal agencies.*—

State of Kansas: Favorable.

Department of Agriculture: Favorable.

Department of the Interior: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee notes that, following the catastrophic floods of 1958, the city of Atchison was declared a disaster area. It also notes that a joint plan has been developed by the Corps of Engineers and the Soil Conservation Service to protect the business district from a recurrence of such an event. The committee feels that in view of the lives that have been lost and the tremendous damages suffered, the proposed improvement is urgently needed, and recommends its early authorization.

## PAPILLION CREEK AND TRIBUTARIES, NEBRASKA

(H. Doc. 475, 87th Cong.)

*Location.*—The Papillion Creek Basin is located in the western suburbs of Omaha, Nebr., and it empties into the Missouri River a few miles downstream from the city.

*Authority.*—Resolution of the Committee on Flood Control, House of Representatives, adopted July 23, 1946.

*Existing project.*—There are no Federal improvements for flood control in the basin. Local interests have constructed levees and improved the stream channels at various points in the basin.

*Flood problem.*—Local channel and levee improvements have been partially effective, but runoff and flood intensities have increased with urbanization. The existing channel capacities on Papillion Creek and tributaries are generally inadequate for flood flows.

*Recommended plan of improvement.*—The proposed plan consists essentially of channel enlargement of Little Papillion Creek, together with necessary bridge modifications and intermittent riprapping, for a distance of about 6.5 miles.

*Estimated cost (price level of December 1960).*—

Federal.....	\$2, 122, 000
Non-Federal.....	1, 400, 000
<b>Total.....</b>	<b>3, 522, 000</b>

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$77, 000	\$65, 200	\$142, 200
Maintenance and operation.....	0	2, 800	2, 800
<b>Total.....</b>	<b>77, 000</b>	<b>68, 000</b>	<b>145, 000</b>
<b>Annual benefits: Damages prevented.....</b>			<b>199, 700</b>

*Benefit-cost ratio.*—1.4.

*Local cooperation.*—Furnish all lands, easements, and rights-of-way; hold and save the United States free from damages; make alterations to all road, highway, bridge and utilities; maintain and operate. Local interests have indicated they are willing and able to comply with these requirements.

*Comments of State and Federal agencies.*—

State of Nebraska: Favorable.

Department of the Interior: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The recommended plan would reduce flood damages in the western suburbs of Omaha, and any watershed erosion control plan which might be found feasible in the future would tend to complement the presently recommended channel improvements. It is further noted that flood protection for a portion of Offutt Air Force Base has been approved for construction as a military project. In view of the need for flood protection the committee recommends its early authorization.



## INDIAN CREEK, IOWA

(H. Doc. 438, 87th Cong.)

*Location.*—Indian Creek rises about 4 miles north of Council Bluffs, Iowa, on the east side of the Missouri River opposite Omaha, Nebr., flows in a southerly direction through the city of Council Bluffs to the river, nearly 6 miles downstream.

*Authority.*—Resolution of the Committee on Public Works, House of Representatives, adopted July 22, 1947.

*Existing project.*—The only Federal improvements for flood control in the basin have been constructed downstream from 29th Avenue to provide an outlet and tieback levees in conjunction with the Missouri River agricultural levee project. Local interests have improved the channel from the north city limits through the highly developed section with nearly 3 miles of open concrete channel and closed conduit.

*Flood problem.*—The topographic characteristics of the upland area cause runoff in Indian Creek Basin to funnel into the heart of Council Bluffs and create potential for a major flood disaster. The standard project flood discharge is considerably in excess of the existing channel capacity of 4,800 cubic feet per second.

*Recommended plan of improvement.*—The proposed plan is part of a joint effort by the Corps of Engineers and the Soil Conservation Service which includes a dam and reservoir for flood control combined with watershed measures in the headwaters. The reservoir recommended by the corps to be located just above the north city limits would be an earth fill structure with a height of 70 feet and a length of 1,900 feet creating a reservoir of about 8,600 acre-feet. The SCS portion of the plan consists of land treatment and structural measures to reduce erosion in the headwaters and silt deposition in the existing channel through the city, which will be reported on by the agency.

*Estimated cost (Price level of 1960).—*

Federal.....	\$1, 270, 000
Non-Federal.....	1, 260, 000
Total.....	2, 530, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$46, 400	\$58, 600	\$105, 000
Maintenance and operation.....		3, 000	3, 000
Total.....	46, 400	61, 600	108, 000
Annual benefits:			
Damages prevented.....			127, 900
Reduced channel maintenance.....			1, 300
Total.....			129, 200

*Benefit-cost ratio.*—

*Local cooperation.*—Furnish all lands, easements, and rights-of-way; hold and save the United States free from damages; make all road, highway, and utility alterations and modifications; enter into contract for reimbursement of the entire cost of operation and maintenance, currently estimated at \$3,000 annually; and provide in cooperation with the Soil Conservation Service under continuing authorization and funding arrangements, an adequate erosion-control program as developed by the SCS and as contemplated in the overall plan of improvement, the installation of such program to be undertaken in advance of or concurrently with construction of the dam and reservoir by the Corps of Engineers. Local interests have indicated they are willing and able to comply with these requirements.

*Comments of the State and Federal Agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

State of Iowa: Favorable.

*Comment of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee is cognizant of the flood damages that can occur when flows exceed the existing closed conduit through the city which was built by local interests. It believes that the plan consisting of a flood detention dam to be constructed by the Corps of Engineers, together with watershed measures to reduce upland erosion to be accomplished under the direction of the Soil Conservation Service, is suitable and economically justified. The relatively high cost of local interests for the usual items of local cooperation for the project recommended by the corps has been noted, and the committee considers these requirements to be proper and equitable.

## GRAND RIVER AND TRIBUTARIES, NORTH AND SOUTH DAKOTA

(H. Doc. 574, 87th Cong.)

*Location.*—Grand River is a western tributary of the Missouri River, formed by the junction of its north and south forks near Shadehill, in the northwestern sector of South Dakota.

*Authority.*—Flood Control Act approved December 22, 1944, and a resolution, Committee on Commerce, U.S. Senate, adopted June 22, 1937.

*Existing project.*—None that effect this report. A local protection project was constructed at Scranton, N. Dak., in 1959, under special continuing authority available to the Chief of Engineers.

*Flood problem.*—The principal areas subject to flooding involve an 80-mile strip of agricultural lands, containing about 16,500 acres, extending from about 6 miles above Haley, N. Dak., downstream to Shadehill Reservoir. County bridges and roads and agricultural fencing are also subject to frequent flood damages. The most damaging flood occurred in 1952, causing losses estimated at \$596,000. Losses of \$478,000 occurred in 1950 at a result of snowmelt and ice jams. The average annual damages are estimated at \$85,300 under June 1961 price levels and development and \$93,800 at future levels of development.



*Recommended plan of improvement.*—A multiple-purpose dam and reservoir on the North Fork of the Grand River at the Bowman-Haley site in North Dakota, the future construction of a water-conveyance system, and coordinated acquisition of an interest in lands for a wild-life habitat improvement project. The reservoir would provide 73,000 acre-feet of storage, including 53,000 acre-feet for flood control and 16,000 acre-feet for conservation purposes to serve water-supply, general recreation, and fish and wildlife purposes. As pertains to future water conveyance facilities, the Chief of Engineers considers that such works should be undertaken by the Federal Government only in the event that local interests are unable to accomplish the necessary planning and construction work by means of their own resources, or with the financial assistance by the Community Facilities Administration, Housing and Home Finance Agency, the Federal agency authorized, subject to certain requirements, to assist non-Federal public agencies in the financing of needed public works of this type.

*Estimated cost (price level of 1961).*—

Federal.....	\$2, 670, 000
Non-Federal.....	( <sup>1</sup> )
Total.....	<sup>2</sup> 2, 670, 000

<sup>1</sup> Local interests to reimburse the United States for construction costs allocated to water supply, estimated at \$743,000.

<sup>2</sup> Does not include local cost for future water conveyance facilities currently estimated at \$1,515,000.

*Project economics (reservoir only <sup>1</sup>).*—

	Federal]	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$62, 400	\$24, 900	\$87, 300
Maintenance and operation.....	5, 400	2, 700	8, 100
Total.....	67, 800	27, 600	95, 400
Annual benefits:			
Flood control.....			74, 000
Water supply.....			55, 000
Recreation.....			24, 000
Fish and wildlife.....			21, 200
Total.....			174, 200

<sup>1</sup> Annual costs and benefits of future water conveyance facilities assumed to be equal.

*Benefit-cost ratio.*—1.8.

*Local cooperation.*—Reimburse the United States for reservoir costs allocated to water supply in accordance with the Water Supply Act of 1958, as amended; bear the entire cost of water conveyance facilities and maintain and operate such facilities; hold and save the United States free from water rights claims and damages due to construction of the project; local interests agree.

*Comments of the States and Federal agencies.*—

Department of the Interior: Recommend authorization at this time, but request authorization to Bureau of Reclamation in accordance with Interior-Army agreement of March 14, 1962.

Department of Agriculture: No objection.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.



State of North Dakota: Favorable.

State of South Dakota: No objection.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget concurs in the view that Federal construction of future water conveyance facilities associated with the recommended Bowman-Haley reservoir project should be undertaken only in the event that local interests are unable to accomplish the necessary planning and construction work by means of their own resources. The Bureau advised that there is no objection to submission of the report to the Congress.

*Secretary of the Army.*—In accordance with the terms of the memorandum of agreement between the Departments of the Interior and Army, dated March 14, 1962, I recommend authorization of the project for construction by the Bureau of Reclamation.

*Remarks.*—The committee believes this to be a worthy project in a location where there is need and area for much economic development. The future water conveyance facilities associated with the basic reservoir project are considered to be a desirable element of the overall plan of improvement, and the committee hopes that local interests will be able to accomplish the necessary planning and construction of these facilities as the need therefor arises. The committee recommends that construction, operation, and maintenance of the Bowman-Haley Reservoir be accomplished by the Corps of Engineers under direction of the Secretary of the Army.

#### FLOYD RIVER, IOWA, MISSOURI RIVER BASIN

The Floyd River flood control project authorized by the Flood Control Act of 1958, in accordance with House Document No. 417, 84th Congress, provided for rectification of an existing flood channel and an auxiliary channel at Sioux City. The authorization provided for highway bridge alterations and additions at local expense.

The report of the Corps of Engineers which recommended alteration of the flood control project did not contemplate construction of any new projects of the type required for interstate highway use. The report of the Corps of Engineers was made May 3, 1956, prior to authorization of the Interstate Highway System. The Interstate Highway System was authorized June 29, 1956. Planning for the section of Interstate Highway 29 was accomplished in the period between June 29, 1956, and November 12, 1958, at which time the construction of this section of the highway was initiated.

Initial preconstruction planning funds for the flood control project were appropriated September 2, 1958. Detailed planning resulted in a modification of the authorized flood control plan to obtain better hydraulic design, avoid railroad difficulties and avoid disruption of large business establishments. This modification includes a new Floyd River channel which crosses the Interstate 29 alignment.

The city requested the Highway Commission delay completion of the interstate highway in the area of the new channel as soon as this modification was adopted; however, the highway was already under construction at that time and the Highway Commission took no delaying action.

The provision in the bill would relieve local interests of the responsibility of constructing the new twin bridges and make this a Federal responsibility.

Through a series of events over which the local people have had no control, a set of twin bridges on Interstate Highway 29 is required in connection with construction of a new main channel for the Floyd River to provide adequate flow into the Missouri River. This new channel represents a change in the original approved plan for the project, and the change has been justified by the Corps of Engineers. At the time the original plan was approved, the interstate highway program had not even been authorized, and requirements for highway bridges could not have been reasonably foreseen. Meanwhile, Interstate Highway 29 has been constructed at the point where the new main channel for the flood control project will flow. The modified language will assure construction of the twin bridges at Federal expense with the other local participation requirements remaining as provided in the original authorization.

#### KOKOSING RIVER BASIN, OHIO

(H. Doc. —, 220, 87th Cong.)

*Location.*—Kokosing River rises in Morrow County, Ohio, and flows through Knox County and into Coshocton County where it joins the Mohican River to form the Wolhonding River. Mount Vernon is located in Knox County at about river mile 24.

*Authority.*—Resolutions of Public Works Committee, U.S. House of Representatives, adopted March 5, 1952, and June 3, 1959.

*Existing project.*—None.

*Flood problem.*—Damaging floods are exceeded on the average of once in 10 years at Fredericktown, once in 5 years at Mount Vernon, and once in 25 years at Millwood. The maximum flood of record in January 1959 had a peak flow of 38,000 cubic feet per second at Mount Vernon. Total damages from the 1959 flood are estimated at \$5,300,000. The average annual damages are estimated at \$151,000 on the basis of mid-1959 prices and stage development.

*Recommended plan of improvement.*—Construction of the North Branch Reservoir on North Branch of Kokosing River, about 2.2 miles upstream from Fredericktown, Ohio, and snagging and clearing of Kokosing River downstream from Tilden Avenue Bridge in Mount Vernon for a distance of about 24,500 feet.

*Estimated cost (price level, June 1959).*—

	North Branch Dam and Reservoir	Mount Vernon clearing and snagging	Total
Federal.....	\$2,334,000	\$104,000	\$2,438,000
Non-Federal.....		113,000	113,000
Total.....	2,334,000	217,000	2,551,000



*Project economics.*—

	North Branch Dam and Reservoir	Mount Vernon clearing and snagging	Total
<b>Annual charges:</b>			
Federal:			
Interest and amortization.....	\$85,300	\$3,700	\$89,000
Operation and maintenance.....	2,400		2,400
Total.....	87,700	3,700	91,400
Non-Federal:			
Interest and amortization.....		4,400	4,400
Operation and maintenance.....		5,500	5,500
Loss of land productivity.....	4,900		
Total.....	92,600	13,600	106,200
<b>Annual benefits: Prevention of flood damages.....</b>	<b>114,700</b>	<b>28,200</b>	<b>142,900</b>
<b>Benefit-cost ratio.....</b>	<b>1.2</b>	<b>2.1</b>	<b>1.3</b>

*Local cooperation.*—For channel snagging and clearing, furnish lands, and rights-of-way; hold and save the United States free of damages; maintain works, repair levees along Kokosing River at Mount Vernon; enlarge the flowage opening at West High Street Bridge; accomplish all changes, relocations and alterations made necessary by the works, except for alteration of railroad bridge at mouth of Dry Creek; prevent encroachment; and adequately inform local interests that the combined project will not provide protection against floods greater than that of January 1959. Agree that construction of the reservoir will be contingent upon prior or simultaneous accomplishment of the snagging and clearing work. Local interests have indicated their willingness and ability to comply with the requirements of local cooperation.

*Comments of State and Federal agencies.*—

Department of Interior: No objection.

State of Ohio: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The Kokosing River Basin survey report recommends construction of two projects for adequate flood damage relief in the vicinity of Mount Vernon, Ohio. The North Branch of Kokosing River Reservoir, and the Mount Vernon snagging and clearing project, along with the existing State-owned conservation dam on the East Branch of the Kokosing and with slight improvement to the existing locally built levees along Kokosing River, would afford practically complete protection to Mount Vernon from the maximum flood of record. In addition, substantial flood damages would be prevented in the rural reaches downstream from the proposed reservoir. The work is amply justified and the committee considers authorization of the projects advisable.

## WABASH RIVER AT MOUNT CARMEL

(H. Doc. 573, 87th Cong.)

*Location.*—Mount Carmel is on the west bank of the Wabash River in southeastern Illinois, about 35 miles southwest of Vincennes, Ind.



*Authority.*—Flood Control Act, July 24, 1946.

*Existing project.*—None.

*Flood problem.*—The most severe flood of recent times was that of March 1913. Recurrence of the March 1913 flood would cause damages of Mount Carmel and vicinity estimated at \$402,000 under 1961 prices and conditions. The future average annual flood damage between Greathouse Creek at Mount Carmel, mile 93.6 and Grand Rapids, mile 97.1 after completion of the Wabash River levee plans is estimated at \$125,000.

*Recommended plan of improvement.*—Provides for construction of 15,900 feet of levee and 1,465 feet of concrete wall with the necessary appurtenant works. The plan of improvement would provide complete protection to practically all of the urban areas within the city limits subject to flooding and some of the agricultural areas.

*Estimated cost (price level of July 1961).*—

Federal.....	\$1, 417, 000
Non-Federal.....	100, 000
Total.....	1, 517, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$52, 500	\$5, 500	\$58, 000
Maintenance and operation.....	500	13, 500	14, 000
Total.....	53, 000	19, 000	72, 000
Annual benefits: Flood damages prevented.....			119, 200

*Benefit-cost ratio.*—1.7.

*Local cooperation.*—Furnish lands and rights-of-way; hold and save the United States free from damages; and maintain and operate the works after completion. Local interests are willing to comply with the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget states that the district engineer's report indicates that installation of authorized agricultural levees in the vicinity of Mount Carmel, principally levee unit No. 5, would, because of stream confinement, increase flood stages and compound flood problems at Mount Carmel. For this reason, the project at Mount Carmel, as a whole, would be economically justified and would be desired by local interests only if levee unit No. 5 is built. Analysis of information in the report also indicates that the selected plan of improvement includes, as separate features, levee protection for two relatively undeveloped tracts of flood plain land at a first cost of \$860,000. As the plan is formulated and evaluated in the report, protection of the tracts would not be economi-

cally justified, and the district engineer's report does not make clear why the selected plan includes these features. The level of protection they afford will, however, apparently counteract the damages from increased flood stages expected to result from installation of levee unit No. 5. The Bureau has recently received from the Corps of Engineers information not contained in the report which indicates conditions under which protection of the tracts could be regarded as economically justified.

While the Bureau of the Budget would have no objection to inclusion of the tracts in the project, the Bureau suggests that the informational deficiencies of the report should be remedied by making available to the Congress an adequate explanation of the basis on which the two tracts were included in the selected plan.

The Bureau of the Budget has no objection to submission of the report to Congress.

*Action by the Secretary of the Army.*—The Secretary states that further information will be made available to Congress as requested.

*Remarks.*—The project will protect the urban areas at Mount Carmel, Ill., and 380 acres of agricultural areas from flood stages of the Wabash River. Mount Carmel is the county seat and principal marketing center of Wabash County. There are a number of diversified industries in the town including the manufacture of radios, record changers, electronic equipment, and automotive wrenches. The committee considers authorization of this project advisable.

#### MAD RIVER ABOVE HUFFMAN DAM, OHIO

(H. Doc. 439, 87th Cong.)

*Location.*—Mad River is a tributary of the Miami River at Dayton, Ohio. Buck Creek, the principal tributary, flows through Springfield, Ohio, to its junction with Mad River.

*Authority.*—Resolution of Public Works Committee, U.S. House of Representatives, adopted February 17, 1959.

*Existing project.*—None.

*Flood problem.*—On Mad River from Springfield to Huffman Dam, a recurrence of the 1913 flood would cause greater damage than any other known past flood. At present development, damages at Wright-Patterson Air Force Base would be \$1,400,000; rural losses would be \$580,000 and urban damages would be \$120,000. Average annual damages are estimated at \$189,000. On Buck Creek where the principal development is the Springfield metropolitan area, a recurrence of the 1929 flood would result in urban damages, mostly industrial, of \$2,238,000 and rural losses would be \$38,000. Average annual damages for the reach are estimated at \$104,000.

*Recommended plan of improvement.*—Provides for construction of a gravel-fill dam at mile 7.3 on Buck Creek. Total storage would be 32,800 acre-feet of which 30,400 acre-feet would be for flood control and 2,400 acre-feet would be for recreation and conservation.

*Estimated cost (price level of July 1960).*—Federal, \$7,930,000.

*Project economics.—*

Annual charges:	
Interest and amortization-----	\$295, 000
Maintenance and operation-----	42, 000
Loss of land productivity-----	14, 000
Total-----	<u>351, 000</u>
Annual benefits:	
Flood damages prevented-----	280, 000
Higher use of land-----	9, 000
Recreation -----	265, 000
Total-----	<u>554, 000</u>

*Benefit-cost ratio.—1.6.*

*Local cooperation.*—Prevent encroachment in Buck Creek channel below the reservoir. Local interests are willing to comply with the requirement of local cooperation.

*Comments of the State and Federal agencies.—*

State of Ohio: Favorable.

Department of Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

*Comments of the Bureau of the Budget.*—No objection to submission of report to Congress. However, the Bureau of the Budget would expect that prior to a request for funds to initiate construction of the Buck Creek Reservoir, the Corps of Engineers would review the economic evaluation of the project in light of the water resource evaluation standards adopted by the administration.

*Remarks.*—The committee considers that the dam and reservoir on Buck Creek will provide an economical and efficient means of alleviating severe flood losses at Springfield, Ohio, and downstream along Mad River such as occurred in January 1959 and in prior years. The committee recommends authorization of this project to reduce flood losses and to provide recreational opportunities in the area.

## BIG SOUTH FORK CUMBERLAND RIVER KY. AND TENN.

(H. Doc. 175, 87th Cong.)

*Location.*—Big South Fork of the Cumberland River is located in north central Tennessee and southeastern Kentucky.

*Authority.*—Resolutions adopted by the Public Works Committee of the U.S. Senate on March 12, 1942, and the House of Representatives on April 18, 1951.

*Existing project.*—There are no Federal improvements in the Big South Fork Basin. There are six existing or authorized dam and reservoir projects in the Cumberland Basin which would be affected by the recommended project.



*Flood problem.*—Local interests desire construction of reservoirs to provide power, flood control, and recreation and to improve the economic study of the area.

*Recommended plan of improvement.*—Plan provides for a multiple-purpose dam and reservoir on Big South Fork, Cumberland River Basin, Ky. and Tenn. for power, flood control, and other purposes, at Devil's Jumps; additional reservoir clearing at Wolf Creek project; and modification of Lake Cumberland operation by transferring 255,000 acre-feet of flood control storage to Devil's Jumps Reservoir.

*Estimated cost (price level of July 1958).*

Federal .....	\$151, 000, 000
Non-Federal .....	None
Total .....	151, 000, 000

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$6, 802, 000	0	\$6, 802, 000
Maintenance and operation and major replacements.....	600, 000	0	600, 000
Taxes foregone.....	3, 641, 000	0	3, 641, 000
Loss in productivity on lands.....	31, 000	0	31, 000
Total.....	10, 074, 000	0	10, 074, 000
<b>Annual benefits:</b>			
Hydroelectric power.....			12, 079, 000
Recreation.....			280, 000
Total.....			12, 359, 000

*Benefit-cost Ratio.*—1.2.

*Local cooperation.*—None.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: No objection.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Kentucky: Favorable.

State of Tennessee: Favorable.

Tennessee Valley Authority: Project power would not be attractive to TVA at this time.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget states that the President in his natural resources message to the Congress instructed the Bureau to reevaluate current standards for appraising the feasibility of water resource projects. If the Devil's Jumps project is authorized by the Congress, the Bureau would expect that prior to a request for funds to initiate construction of the Devil's Jumps project, the Corps of Engineers would reallocate the costs of the project to the extent necessary to conform to the water resources evaluation standards adopted by the administration. The Bureau advises that there would be no objection to the submission of the report to the Congress.

*Remarks.*—The project is an economically feasible and desirable unit in the comprehensive plan for the development of the water resources of the Cumberland River and as presently planned would provide 255,000 acre-feet of flood control storage and would add 596,000 kilowatts of dependable capacity and 533 million kilowatt-hours of hydroelectric power to the Cumberland River system. The proposed reservoir would provide needed electric energy and improve the economic status of a labor surplus area. Recreation will be important as an associated reservoir purpose. The proposed flood control storage allocation of 255,000 acre-feet in the project would permit use of equivalent flood-control capacity at the completed Wolf Creek Reservoir project for power operations to increase the operating head and power output at that project as a means of maximizing the benefits of the Cumberland River system. The benefit-cost ratio is 1.2 to 1 and the committee considers that the planned work will aid the economic growth of this area.

#### KENTUCKY RIVER, KY.

(H. Doc. 423, 87th Cong.)

*Location.*—The Kentucky River, a tributary of the Ohio River, is located in central Kentucky.

*Authority.*—Resolutions of Public Works Committees of the Senate adopted April 22, 1953, and of the House of Representatives adopted April 21, 1950, and July 29, 1953, for flood control and navigation.

*Existing project.*—The plan of development for the basin includes the Buckhorn, Booneville, and Jessamine Creek Reservoir projects and local protection works at Jackson and Frankfort for flood control. There is a 6-foot deep navigation project from the Ohio River to the confluence of the Middle and North Forks about 260 miles formed by 14 locks and dams.

*Flood problem.*—A recurrence of the January-February 1957 flood would cause damages estimated at \$11.7 million; average annual damages on main stem and principal tributaries are estimated at \$2.7 million.

*Recommended plan of improvement.*—Plan provides for three additional dams and reservoirs for flood control and recreation on Red River, Carr Fork, and Eagle Creek. Navigation improvements were not found warranted at this time. Recommendation also provides for deletion from the plan of the Jessamine Creek project which has not been constructed.

*Estimated Cost (price level January 1958).*—

	Reservoir projects			
	Red River	Carr Fork	Eagle Creek	Total
Federal.....	\$8,020,000	\$9,020,000	\$8,980,000	\$26,020,000

*Project economics.*—

	Reservoir projects		
	Red River	Carr Fork	Eagle Creek
Annual charges:			
Interest and amortization.....	\$294,000	\$314,000	\$322,000
Maintenance, operation and major replacements.....	40,000	32,000	39,000
Loss of land productivity.....	2,000	8,000	19,000
Total.....	336,000	354,000	380,000
Annual benefits:			
Flood damages prevented.....	421,000	457,000	329,000
Recreation.....	70,000	30,000	170,000
Total.....	491,000	487,000	499,000
Benefit-cost ratio.....	1.5	1.4	1.3

*Local cooperation.*—None.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection. Requested recreation be made a project purpose in Red River Reservoir.

Department of Commerce: No objection.

Department of Health, Education, and Welfare, Public Health Service: Favorable.

Federal Power Commission: No objection.

State of Kentucky: Favorable.

*Comments of the Bureau of the Budget.*—No objection to submission of report to Congress. However, the Bureau of the Budget would expect that prior to a request for funds to initiate construction of the Eagle Creek Reservoir, the Corps of Engineers would review the economic evaluation of the project in light of the water resource evaluation standards adopted by the administration.

*Remarks.*—The committee notes that severe flood losses have occurred in the Kentucky River Basin which have severely hampered the economy of the area. The committee considers that the three additional reservoirs augmenting the planned water resource development are amply justified and are essential to provide flood protection downstream. The committee recommends authorization of this work.

#### TWELVEPOLE CREEK, W. VA.

(H. Doc. 520, 87th Cong.)

*Location.*—Twelvepole Creek, a tributary of the Ohio River, is in southwestern West Virginia.

*Authority.*—Resolution of Public Works Committee, House of Representatives, adopted June 13, 1956.

*Existing project.*—East Lynn Reservoir on East Fork, was authorized by the Flood Control Act of 1938 as a unit in the comprehensive plan for flood control in the Ohio River Basin. Floodwalls have been constructed at mouth of the stream, for protection of Huntington and Ceredo from Ohio River floods.



*Flood problem.*—Headwater floods cause damages from above the junction of East and West Forks to mile 25 on Twelvepole Creek. From mile 25 to mile 10, damages are caused by a combination of headwater and Ohio River backwater, while below mile 10, damages are restricted to backwater flooding. Numerous areas are subject to flooding along both forks but more extensive areas are flooded along East Fork below Stiltner, particularly at East Lynn. The maximum flood of record, February 1939, reached a crest stage of 31 feet at Wayne and had an estimated discharge of 21,900 cubic feet per second. The average annual damages in the basin are estimated at \$141,500 under November 1960 prices and conditions.

*Recommended plan of improvement.*—Provides for construction of an earthfill dam at mile 3.3 on Beach Fork. Total storage would be 43,785 acre-feet at which 37,530 acre-feet would be for flood control and 6,255 acre-feet would be permanent storage.

*Estimated cost* (price level, June 1961).—All Federal, \$11 million.

*Project economics.*—

Annual charges:	
Interest and amortization-----	\$325, 000
Maintenance and operation-----	40, 000
Major replacement-----	3, 500
Loss of land productivity-----	11, 500
Total-----	380, 000
Annual benefits:	
Flood damages prevented-----	316, 400
Recreation -----	254, 800
Total-----	571, 200

*Benefit-cost ratio.*—1.5.

*Local cooperation.*—None required.

*Comments of the State and Federal agencies.*—

Department of Interior: No objections.

Department of Agriculture: No objections.

Department of Commerce: No objections.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of West Virginia: Favorable.

*Comments of the Bureau of the Budget.*—No objections.

*Remarks.*—The Beech Fork Reservoir project proposed in this report is a unit of the plan for flood protection of Twelvepole Creek and the Ohio River. The Twelvepole Creek Basin is subject to destructive floods principally from severe summer-type storms but also from basinwide winter rains and from Ohio River backwater in the lower reaches. Operation of the reservoir for flood control would prevent some of the damages caused by headwater flooding and would alleviate damages resulting from combined headwater and backwater floods.

The committee considers the project to be justified and its completion highly desirable.

## GUYANDOT RIVER AND TRIBUTARIES, W. VA.

(H. Doc. 569, 87th Cong.)

*Location.*—Guyandot River, a tributary of the Ohio River at Huntington, is located in southwestern West Virginia.

*Authority.*—Resolutions of the Public Works Committees, U.S. Senate and House of Representatives adopted February 16, 1957, and July 1, 1958, respectively.

*Existing project.*—Mud River Reservoir was authorized by Flood Control Act approved June 28, 1938. Floodwalls have been constructed at mouth of stream for protection of Huntington against Ohio River floods and Guyandot River backwater.

*Flood problem.*—The areas subject to greatest damages are those along and at the mouth of Dingess Run at Stallings, and along Island Creek at Logan. Other areas frequently damaged are the communities of Mullens, Pineville, Man, Baileyville, Gilbert, and Chapmanville, all along the main stem. The maximum flood of record, except at Man, occurred in January 1957. Basin damages of over \$2,500,000 were concentrated principally around Logan, where losses approximated \$1,750,000. The average annual damages in the Guyandot River basin under July 1961 conditions are estimated at \$407,000.

*Recommended plan of improvement.*—Provides for construction of a dam at about mile 117 on Guyandot River, about 5 miles upstream of Justice, W. Va. Total storage would be 196,000 acre-feet, of which 22,000 acre-feet would be for sediment storage and recreation and 174,000 acre-feet would be for flood control. Of the flood control capacity, 3,000 acre-feet would be reserved for water quality control on a seasonal basis.

*Estimated cost (price level, July 1961).*—All Federal, \$60,477,000.

**Annual charges (all Federal):**

Interest and amortization.....	\$1, 807, 000
Maintenance and operation.....	65, 000
Major replacements.....	2, 000
Loss of land productivity.....	24, 000

Total..... 1, 898, 000

**Annual benefits:**

Flood damages prevented.....	1, 784, 000
General recreation.....	296, 000
Fish and wildlife recreation.....	35, 000
Water quality control.....	25, 000

Total..... 2, 140, 000

*Project economics.*—

*Benefit-cost ratio.*—1.1.

*Local cooperation.*—None required.

*Comments of the State and Federal agencies.*—

Department of Agriculture: No objection.

Department of the Interior: No objection.

Department of Commerce: No objection.

Department of Health, Education, and Welfare: No objection.

Federal Power Commission: Favorable.

State of West Virginia: Favorable.



*Comments of the Bureau of the Budget.*—The Bureau of the Budget states that, if the project is authorized by Congress, the Bureau would expect any request for funds to initiate construction to be accompanied by a reevaluation report containing adequate evidence that the project is economically justified after meeting certain conditions which would minimize the loss of mineral reserves.

The Bureau further states that it believes that, if the project is authorized by the Congress, arrangements should be made in connection with preconstruction planning for further consideration of the views of affected interests within the project area. The Bureau notes that it would appear advisable that provision be made for conduct of public hearings in the locality, which under usual Corps of Engineers procedures would have appropriately preceded a recommendation for authorization of the project. Such hearings could be carried out in connection with the public meetings required under the provisions of the Land Acquisition Policy Act of 1960.

The Bureau of the Budget advises that there is no objection to the submission of the report to the Congress; however, it states that no commitment can be made at this time as to when any estimate of appropriation would be submitted for construction of the project, if authorized by the Congress, since this would be governed by the President's budgetary objectives as determined by the then prevailing fiscal situation.

*Remarks.*—The Justice Reservoir project will supply a substantial degree of flood control in the valley below, and the conservation pool will form a small attractive lake for recreation in the future. The project construction will provide employment in this area where economic redevelopment is needed and the project operation will augment waaterflows downstream for future industrial development. The committee considers that the project is economically feasible and early construction is warranted.

#### BUCKHANNON RIVER, W. VA.

(S. Doc. 43, 87th Cong.)

*Location.*—Buckhannon River is formed in Upshur County, W.Va. by the junction of its right and left forks, thence flows generally northerly 46 miles to the Tygart River about 28 miles upstream of Tygart Dam. The city of Buckhannon, at mile 25, is on a U-bend of the river about 2.3 miles long.

*Authority.*—Resolution of Public Works Committee of the U.S. Senate, adopted April 30, 1958.

*Existing project.*—None.

*Flood problem.*—Floods of major proportions may occur at Buckhannon at any time of the year. The maximum flood of record, in March 1918, had a peak flow of 12,000 cubic feet per second and reached an elevation of 1,416.3, or 7.3 feet above the no-damage stage, at the Elias Street Bridge. Floods exceeding 8,000 cubic feet per second cause serious damage and occur on the average of once in 2.4 years. A recurrence of the 1918 flood under 1960 conditions would



inundate 511 acres within the city and cause damages estimated at \$397,000, principally to residents and commercial properties. Average annual damages, on the basis of 1960 conditions and values, are estimated at \$71,300.

*Recommended plan of improvement.*—Provides for channel improvement by widening, deepening, and realining the channel from a point 1,280 feet below the lower Baltimore & Ohio Railroad bridge about 4 miles downstream of the corporate limits, to and through the existing raceway, a distance of approximately 4.6 miles.

*Estimated cost.*—(price level of April 1960)

Federal .....	\$1, 206, 000
Non-Federal .....	54,000
Total .....	1, 260, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$45, 700	\$2, 900	\$48, 600
Maintenance and operation.....		2, 500	2, 500
Total.....	45, 700	5, 400	51, 100
Annual benefits: Flood damages prevented.....			62, 900

*Benefit-cost ratio.*—1.2.

*Local cooperation.*—Furnish lands and rights-of-way; hold and save the United States free from damages; maintain all works after completion; perform all necessary relocations and alterations of utility facilities; establish channel limit lines and prevent encroachment; annually inform local interests that the project will not provide protection against maximum floods; and that under extraordinary stream runoff conditions the water level may exceed elevation 1,416 at the Elias Street Bridge. Local interests are willing to accept the terms of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection.

State of West Virginia: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The city of Buckhannon is the county seat of Upshur County, and is an important residential, commercial, agricultural, and educational center for an area containing about 20,000 people. It is also a highway, railroad, coal-mining, and industrial center. The city has a severe flood problem. Flooding isolates the business district and disrupts the economy and safety of the community. The proposed project would eliminate damage from modern floods and would significantly reduce damage from major floods. The benefit-cost ratio is 1.2. The committee believes this project to be urgently needed after carefully considering the testimony submitted.

## CRAB CREEK AT YOUNGSTOWN, OHIO

(H. Doc. 440, 87th Cong.)

*Location.*—Crab Creek is a tributary of the Mahoning River at Youngstown, Ohio.

*Authority.*—Resolution of Public Works Committee, U.S. House of Representatives, adopted February 17, 1959.

*Existing project.*—None.

*Flood problem.*—The flood of January 1959 was the largest of modern record, with an estimated peak discharge of 2,550 cubic feet per second downstream of the Valley Street Bridge. Five other floods, approaching that of January 1959 in magnitude, occurred in the period 1936 through April 1959. Recurrence of the January 1959 flood would result in damages of \$233,900 based on 1960 prices and development. Average annual damages under 1960 conditions would be \$115,000. The backwater effect of the Mahoning River during the 1959 flood was estimated to have been downstream of the damage area in the lower reach of Crab Creek.

*Recommended plan of improvement.*—Provides for enlarging, paving, and clearing about 2.4 miles of creek channel within the city, and for minor dredging in Mahoning River at the mouth of the creek. The work would require replacement of three railroad bridges and alteration of utilities.

*Estimated cost price level May (1960).*—

Federal .....	\$2, 268, 000
Non-Federal .....	245, 000
Total .....	\$2, 513, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$85, 500	\$12, 500	\$98, 000
Maintenance and operation.....		8, 000	8, 000
Total.....	85, 500	20, 500	106, 000
Annual benefits: Flood damages prevented.....			120, 000

*Benefit-cost ratio.*—1.1.

*Local cooperation.*—Furnish lands and rights-of-way; hold and save the United States free from damages; maintain and operate the works after completion; accomplish changes and alterations except the three railroad bridges; prevent encroachment; bear additional cost resulting from construction of cut-off channel near Andrew Avenue if such is desired; prevent dumping in creek; annually inform local interests of limited degree of protection; and enlarge waterway openings of restrictive bridges downstream of Valley Street. Local interests are willing to comply with the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

State of Ohio: Favorable.

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The city of Youngstown, with a population of 166,689 (1960 census) is the center of one of the five leading steel producing districts in the United States. In addition to basic steel production, there is a wide diversity of manufacture in the area. About 24 percent of the city is contained within the Crab Creek Basin, and much of the area in the flood plain is occupied by industrial and commercial plants. Lower Crab Creek valley has a major flood problem. In addition to major floods, nuisance floods occur at least annually. The proposed project would eliminate damages in the Crab Creek area from floods up to that of the maximum flood of recent record, that of January 1959. The benefit-to-cost ratio is 1.4 to 1.

The committee considers this worthwhile project in this important area to be amply justified.

#### SCIOTO RIVER BASIN, OHIO

(H. Doc. 587, 87th Cong.)

*Location.*—The Scioto River, a major tributary of the Ohio River at Portsmouth, is located in central Ohio.

*Authority.*—Flood Control Act approved August 28, 1937.

*Existing project.*—Delaware Reservoir, on Olentangy River, constructed in 1951, is a Federal project. A local protection project at the mouth of the Scioto River, completed in 1950, provides a high degree of protection to Portsmouth and New Boston, Ohio, primarily from Ohio River floods. Reservoirs on Big Darby, Deer, Paint, and Rocky Fork Creeks are included in the comprehensive plan for the Ohio River Basin approved by the Flood Control Act of June 28, 1938. None have been built by the Federal Government. Rocky Fork project was constructed by the State of Ohio.

*Flood problem.*—The principal damage centers are at Columbus, Chillicothe, Prospect, Greencamp, LaRue, and Kenton. The maximum flood of record for most of the basin occurred in March 1913, in which 145 deaths were recorded. The January 1959 flood exceeded the March 1913 flood in the Alum Creek and Big Walnut Creek areas and caused widespread damages in other parts of the basin. The January 1959 flood caused damages in the basin estimated at about \$11,950,000. Average annual damages for the basin are estimated at \$3,660,000 based on July 1961 prices and conditions.

*Recommended plan of improvement.*—Provides for construction of Alum Creek, Mill Creek, and Salt Creek Reservoirs, all for flood control, general and fish and wildlife recreation, and related purposes; channel improvements in the Scioto River at Columbus, and flood protection at Chillicothe by construction of concrete walls, earth levees, and appurtenant works; and modification of the present authorization of Deer Creek Dam and Reservoir to provide a waterfowl management unit, consisting of additional project lands, a subimpoundment pool, and public water supply and sanitary facilities.



*Estimated cost (price level, July 1961).—*

	Federal	Non-Federal	Total
Local protection:			
Columbus.....	\$445,000	\$126,000	\$571,000
Chillicothe.....	2,462,000	905,000	3,367,000
Reservoirs:			
Alum Creek.....	<sup>1</sup> 22,700,000	-----	<sup>1</sup> 22,700,000
Mill Creek.....	16,550,000	-----	16,550,000
Salt Creek.....	13,150,000	-----	13,150,000
Dear Creek Waterfowl Management Unit.....	540,000	-----	540,000
Total.....	55,847,000	1,031,000	56,878,000

<sup>1</sup> \$11,060,000 is reimbursable by local interests for water supply.

*Project Economics.—*

Project	Annual economic costs	Annual benefits	Benefit-cost ratio
Local protection:			
Columbus.....	\$30,000	\$169,000	5.6
Chillicothe.....	111,000	138,000	1.2
Recommended reservoirs:			
Alum Creek.....	888,000	3,030,000	3.4
Mill Creek.....	624,000	1,131,000	1.8
Salt Creek.....	534,000	1,146,000	2.1
Dear Creek Wildlife Management Unit.....	32,000	( <sup>1</sup> )	-----
Total.....	2,219,000	5,614,000	-----

<sup>1</sup> The additional lands and facilities in conjunction with the area which would be used jointly for waterfowl management and other project purposes would provide substantial pond fishing, farm game hunting, waterfowl hunting, and other recreational opportunities.

*Local cooperation.*—Reimburse the United States the first and annual costs allocated to water supply from Alum Creek Reservoir, an amount presently estimated at \$11,060,000 and \$30,000, respectively; for the channel improvement at Columbus, Ohio, and the local-protection works at Chillicothe, Ohio, furnish lands and rights-of-way; hold and save the United States free from damages; maintain the improved Columbus Channel and prevent encroachment thereon; maintain and operate the works at Chillicothe; and prior to construction at Chillicothe, provide a highway embankment and appurtenant drainage works, perform certain remedial works at U.S. Highway 23 bridge, backfill existing gravel pits, and widen the channel of Scioto River for a distance of 22,000 feet; provided further that construction of the individual projects recommended for authorization will not be construed as a commitment by the Federal Government nor by responsible non-Federal interests for construction of the remaining projects; and provided further that construction of the local-protection works at Chillicothe be contingent upon prior construction and operation of the upstream reservoirs for flood control. Local interests are willing to comply with the requirements of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: No objection.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Ohio: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget recommends that authorization of the proposed modification to Deer Creek Reservoir for waterfowl enhancement and for improved hunting and fishing recreation be deferred until such time as policy matters pertaining thereto are resolved.

*Action by the Secretary of the Army.*—The Secretary of the Army concurred in the views of the Bureau of the Budget. On this basis the net cost to the United States is estimated at \$55,307,000.

*Remarks.*—There is an urgent need for improvements to provide flood protection, water quality control, water supply and outdoor recreation in the basin. The plan will assure a dependable water supply for the future economic growth of the Columbus metropolitan area. The State of Ohio has concurred in the report. Although the conservation of the waterfowl resource is a desirable aim, the committee agrees that authorization of the Deer Creek Waterfowl Management Unit should be deferred until policies relating to purchase of lands and cost-sharing in such work are clarified. However, the committee notes and agrees that this work is a separable unit of the authorized Deer Creek Dam and Reservoir and deferral of the waterfowl unit will not effect its construction or operation. On this basis, the committee considers authorization of the recommended improvements advisable. The bill does not provide authorization for additional lands for establishment of a wildlife refuge.

The Chief of Engineers has recommended the construction of this project at a total cost of \$58,754,000. However, the project as recommended included the acquisition of additional lands for the establishment of a wildlife refuge. It is the opinion of the committee that this particular aspect of this project should be restudied, and accordingly, has reduced the Federal cost to \$55,307,000. The difference represents the estimated cost of acquiring the lands for wildlife refuge purposes.

#### ALLEGHENY RIVER AT SALAMANCA, N.Y.

(H. Doc. 166, 87th Cong.)

*Location.*—Allegheny River rises in north-central Pennsylvania, flows northwesterly to Salamanca, N.Y., and thence southwesterly to Pittsburgh, Pa., where it joins the Monongahela to form the Ohio River.

*Authority.*—Resolution of the Committee on Public Works, U.S. Senate, adopted May 9, 1949, and resolution of the Committee on Public Works, House of Representatives, adopted July 6, 1949.

*Existing project.*—None.

*Flood problem.*—Flooding in Salamanca is caused by rainfall and snowmelt, coupled with the inadequacy of the river channel through the city and downstream.

*Recommended plan of improvement.*—Provides for construction of levees and floodwalls with appurtenant interior drainage facilities including pumping plants, in three areas, along the Allegheny River at Salamanca, N.Y.

*Estimated cost (price level of July 1960).*—

Federal	-----	\$1, 390, 000
Non-Federal	-----	275, 000
Total	-----	1, 665, 000



*Project economics.*—

	Federal	Non-Federal	Total
Annual charges.....	51,900	14,600	66,500
Annual benefits: Flood damages prevented.....			74,500

*Benefit-cost ratio.*—1.12.

*Local cooperation.*—Furnish lands and rights-of-way; hold and save the United States free from damages; accomplish all changes, relocations, and alterations of buildings, utilities, and structures; prevent encroachment on the improved waterway; and maintain and operate the works after completion. New York State Flood Control Commission has furnished assurances of local cooperation.

*Comments of State and Federal agencies.*—

Department of the Interior: No objection.

State of New York: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee notes that flooding along the Allegheny River is caused both by overflow of the river during high discharges or to ice jams or a combination of both. The committee considers that the planned protection of the three zones of the city of Salamanca should be considered collectively because of the interdependence of the areas for effective functioning of the safety and public welfare forces of the local government. The substantial non-Federal cost involved is noted. The committee considers that authorization of the project is warranted.

## FRENCH CREEK BASIN, PA.

(S. Doc. 95, 87th Cong.)

*Location.*—French Creek, a major tributary of the Allegheny River, is located in northwestern Pennsylvania and southwestern New York.

*Authority.*—Resolution of Public Works Committee, U.S. Senate, adopted May 12, 1950.

*Existing project.*—French Creek Reservoir below Cambridge Springs, authorized by the Flood Control Acts of 1936 and 1938, would have flood control storage of 117,000 acre-feet. This project is presently classified inactive. A Federal snagging and clearing project at Cochranton, Pa., was completed in 1948.

*Flood problem.*—The flood problem is most severe at Meadville, but exists wherever the stream slopes are flat along the entire French Creek Valley particularly from above Cambridge Springs to and including Cochranton. The flood of April 1947, the highest of record in the upper basin, overflowed 7,000 acres of rural land and 600 acres of urban land. Its recurrence in 1960 would have caused damages estimated at \$3 million. The January 1959 flood, augmented by an ice jam, resulted in the maximum stages of record at Meadville which under 1960 conditions would also have caused damages of almost \$3 million. The average annual flood damages are estimated at \$1,260,000.



*Recommended plan of improvement.*—Consists of a system of three reservoirs with the following physical features:

Item	Reservoir		
	Union City	Muddy Creek	Woodcock Creek
Stream.....	French Creek	Muddy Creek	Woodcock Creek
Location, river miles.....	71.2	61	46
Type.....	Earth	Earth	Earth
Total storage, acre-feet.....	48,000	19,600	15,100
Flood control storage, acre-feet.....	Same	Same	14,700
Recreation, acre-feet.....			400

Revocation of the French Creek Reservoir authorization is also recommended.

*Estimated cost (price level of May 1960).*—

	Union City	Muddy Creek	Woodcock Creek	Total
Federal.....	\$8,596,000	\$7,110,000	\$7,396,000	\$23,102,000

*Project economics.*—

	Union City	Muddy Creek	Woodcock Creek	Total
<b>Annual charges:</b>				
Interest and amortization.....	\$324,500	\$268,600	\$263,800	\$856,900
Maintenance and operation.....	9,600	11,000	30,500	51,100
Loss of land productivity (economic cost) ..	1,900	1,400	700	4,000
Total.....	336,000	281,000	295,000	912,000
<b>Annual benefits:</b>				
Flood damages prevented.....	822,000	302,000	279,000	1,403,000
Recreation.....			65,000	65,000
Total.....	822,000	302,000	344,000	1,468,000
Benefit-cost ratio.....	2.4	1.07	1.17	1.6

*Local cooperation.*—Annually inform local interests that the project reservoirs do not provide protection against maximum floods. Local interests are willing to comply with requirement of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: No objection.

Department of Health, Education, and Welfare: No objection.

Federal Power Commission: No objection.

Commonwealth of Pennsylvania: Favorable.

*Comments of the Bureau of the Budget.*—No objection to submission of report to Congress. However, would expect that prior to a request for funds to initiate construction of the Woodcock Creek project, the Corps of Engineers would review the economic evaluation of this project in light of the water resource evaluation standards adopted by the administration.

*Remarks.*—The system of three reservoirs in the French Creek Basin plan would afford an effective measure of flood protection to the principal damage centers in the basin, including Meadville, and would supplement the protection afforded by other flood control reservoirs in the valleys below the basin. The committee believes that the projects offer the most economical and satisfactory plan for water resource development in the French Creek Basin.

#### ILLINOIS RIVER AND TRIBUTARIES

(H. Doc. 472, 87th Cong.)

*Location.*—The Illinois River Basin is located in portions of Illinois, Wisconsin, and Indiana.

*Authority.*—Resolutions adopted by the Committee on Flood Control of the House of Representatives, United States, one on July 28, 1937, and one on May 14, 1941; and in review of reports in response to an authorization contained in section 6 of the Flood Control Act approved August 11, 1939.

*Existing project.*—Federal improvements in that part of the basin under consideration include 53 authorized flood-control projects, of which 34 local protection projects are completed, 1 is under construction, and 18, including Chandlerville No. 2 Reservoir on Sangamon River, have not been started; and the Illinois Waterway for navigation, which provides for a channel 9 feet deep over varying widths between Lake Michigan and the Mississippi River by means of 8 locks and 7 dams. Also, the former Chautauqua Drainage and Levee District has been converted to a wildlife refuge and is operated by the U.S. Fish and Wildlife Service.

*Water resources problems.*—Flood problems in the basin are caused by inadequate channel capacities and, in some cases, by encroachment on the stream-carrying capacity by bridges and other structures. The sources of municipal and industrial water supply in the basin are wells, streams, and reservoirs. Increasing demands are causing depletion and imposition of limited usage.

*Recommended plan of improvement.*—Consists of a multiple purpose dam and reservoir at Oakley and associated downstream channel improvement project, enlargement of existing levees and/or new levees and floodwalls and channel improvement for protection of 3 urban and 13 agricultural areas, remedial work at the mouth of the Sangamon River, at a Federal construction cost of \$71,465,000, the net cost to the United States is \$66,866,000 after reimbursement by non-Federal interests of the costs allocated to water supply. For deauthorization of the following projects authorized in the 1936 Flood Control Act: (a) Sangamon River, mouth of Salt Creek to Roby, Ill.; (b) Sangamon River and Salt Creek (Sangamon River portion only); (c) Clear Lake Levee at junction of Sangamon and Illinois Rivers, Ill.; and (d) McGee Creek Drainage and Levee District, Illinois River. The recommendation also provides that construction of any one project may be undertaken independently of the others upon compliance with the prescribed requirements of local cooperation pertaining thereto.

*Estimated cost (price level March 1961).—*

	Oakley Dam and Reservoir	Local protection projects and mouth of Sangamon River	Total
Federal.....	\$29,621,000	\$41,844,000	\$71,465,000
Non-Federal.....	( <sup>1</sup> )	4,091,000	4,091,000
Total.....	29,621,000	45,935,000	75,556,000

<sup>1</sup> \$4,599,000 to be reimbursed by local interests for water supply.

*Project economics.—*

[In thousands of dollars, March 1961 prices]

Project	Total cost	Total annual charges	Total annual benefits	Benefits-to-cost ratio
Oakley Reservoir and channel improvement....	29,621	1,388.0	1,624.0	1.2
Peoria, Ill.....	13,686	581.0	588.0	1.01
Meredosia, Ill., and Meredosia, Willow Creek, and Coon Run Drainage and Levee Districts....	2,338	95.2	121.7	1.3
Eldred, Ill.....	554	21.4	40.3	1.9
Indian Creek area.....	3,851	153.4	173.4	1.1
Meredosia Lake and Willow Creek Drainage and Levee Districts.....	1,615	60.9	66.6	1.1
McGee Creek Drainage and Levee District.....	3,486	136.0	160.0	1.2
Scott County Drainage and Levee District.....	2,920	112.8	140.0	1.2
Big Swan Drainage and Levee District.....	2,513	96.9	130.0	1.3
Hillview Drainage and Levee District.....	2,148	82.2	127.1	1.5
Hartwell Drainage and Levee District.....	2,177	82.9	95.4	1.2
Keach Drainage and Levee District.....	1,907	72.9	78.8	1.1
Eldred and Spankey Drainage and Levee District.....	2,415	92.3	169.1	1.8
Nutwood Drainage and Levee District.....	1,652	63.1	104.2	1.7
Lake Fork of Salt Creek (Sangamon River)....	1,516	76.6	116.4	1.5
Farmers Drainage and Levee District.....	785	34.7	70.2	2.0
Clear Lake Special Drainage District.....	2,334	114.3	139.8	1.2
Remedial work near mouth of Sangamon River....	38	1.9	-----	-----
Total.....	75,556	-----	-----	1.2

*Local cooperation.*—(a) Oakley Reservoir project: agree to pay the first cost allocated to water supply, such cost being presently estimated at 15.5 percent of the total, or \$4,599,000, with such modification in these amounts as may be necessary to reflect adjustments in the storage capacity for water supply and other purposes, to be paid in a lump sum prior to construction with appropriate adjustments when actual costs are determined, or in installments prior to commencement of pertinent items, in accordance with construction schedules as required by the Chief of Engineers, or by annual payments, including interest during construction and interest on the unpaid balance, over the life of the project as determined by the Chief of Engineers, or 50 years, whichever is the lesser; agree to pay annually as they occur the costs of operation and maintenance allocated to water supply, such costs being presently estimated at 22.7 percent of the total, or \$43,000, with such modification in these amounts as may be necessary to reflect adjustments in the storage capacity for water supply and other purposes; maintain all roads and bridges in the reservoir area and over the improved channel downstream from the dam in accordance with



regulations prescribed by the Secretary of the Army; hold and save the United States free from all water-rights claims resulting from construction and operation of the project, and operate the existing non-Federal dam and reservoir at Lake Decatur for flood control in accordance with regulations approved by the Secretary of the Army. (b) Local protection projects: furnish without cost to the United States all lands, easements, rights-of-way, and ponding and spoil-disposal areas necessary for construction of the project; hold and save the United States free from damages due to the construction works; bear the expense of relocating and altering highways, highway bridges (except underpinning), utilities, buildings, interior drainage facilities, pipelines, and other structures, except railroad bridges and approaches; prescribe and enforce regulations satisfactory to the Secretary of the Army to prevent encroachment on the improved channels and ponding areas; and maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

Department of Commerce: Favorable.

Federal Power Commission: Favorable.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.—*Local interests desire flood control improvements in the basin. Consideration of use of water stored in reservoirs for water supply and recreation was urged by representatives of several communities in the southern portion of the basin. The committee considers the recommended improvements justified for flood control, and that inclusion of water supply storage in the Oakley Reservoir with reimbursement for such storage to be made under the provisions of the Water Supply Act of 1958 is appropriate. Authorization of the project at this time is regarded as highly desirable.

REND LAKE, ILL.

(H. Doc. 541, 87th Cong.)

*Location.—*Southern Illinois, about 5 miles from Benton, Ill.

*Authority.—*House Public Works Committee, July 6, 1949.

*Existing project.—*None.

*Water resources problems.—*(a) Flooding: Storms with heavy rainfall occur most frequently during spring and early summer. The flood of May 1961 was the largest of the six major floods which have occurred in the basin since 1915. Maximum discharge at Benton was 35,800 cubic feet per second. About 103,400 acres of bottom land along Big Muddy River below the proposed Rend Lake Dam site, at mile 103.7, are subject to flooding. The average annual damage is estimated at about \$157,000, of which \$57,000 is crop damage and \$100,000, property damage.

(b) Water supply: Municipal and industrial water is presently obtained from wells or surface impoundments. Seasonal fluctuations and extended drought periods seriously deplete water supplies. With allowances for existing water supply facilities, it is estimated that the net increase in water demand by 2010 within 25 miles of Benton will be about 40 million gallons per day.

(c) Stream pollution: It is anticipated that, under State law, municipalities will take proper measures to correct the general pollution problem for normal streamflow conditions. However, low flow augmentation is desirable during drought periods when there may be little or no flow in the river.

*Recommended plan of improvement.*—The most feasible plan of development would consist of a rolled-earth dam on Big Muddy River at mile 103.7. The dam would be 42 feet high above the floodplain with a reinforced concrete spillway and an auxiliary earth spillway located in the east abutment. The continued length of dam and spillway would be 8,900 feet. Outlet works through the earth section of the dam would consist of two 6- by 6-foot sluices for regulation of the pool under normal operating conditions and drawdown of the pool. The reservoir would have a capacity of 302,500 acre-feet consisting of 111,500 for flood control, 109,000 for water supply, 57,000 for pollution abatement, and 25,000 for siltation. As an adjunct to the project, two small impoundments would be provided on two of the upper arms of the reservoir for wildlife conservation.

*First costs.*—Federal, \$35,500,000.<sup>1</sup>

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$838,000	\$297,000	\$1,135,000
Maintenance and operation including major replacements..	79,000	9,000	88,000
Total.....	917,000	306,000	1,223,000
<b>Annual benefits:</b>			
Damages prevented.....			216,000
Recreation.....			536,000
Water supply.....			301,000
Area redevelopment.....			285,000
Pollution abatement.....			61,000
Fish and wildlife conservation.....			312,000
Added transportation costs.....			36,000
Total.....			1,675,000

*Benefit-cost ratio.*—1.4.

*Local cooperation.*—(a) Hold and save the United States free from damages for any water-rights claims resulting from construction and operation of the project; (b) Reimburse the United States in accordance with the Water Supply Act of 1958, as amended, the first costs and the annual operation and maintenance costs allocated to municipal and industrial water supply storage, tentatively estimated at \$6,031,000 and \$8,800, respectively, for the ultimate development.

<sup>1</sup> \$6,031,000 to be repaid by local interests for water supply.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Public Health Service: Favorable.

Federal Power Commission: Favorable.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.—*The committee urges adoption of this worthy multiple-purpose project that would serve numerous water needs, provide flood control, and contribute to the redevelopment of the economy of the area.

## MISSISSIPPI RIVER AT GUTTENBERG, IOWA

(H. Doc. 286, 87th Cong.)

*Location.—*Guttenberg is in northeastern Iowa on the right bank of the Mississippi River.

*Authority.—*Two resolutions of the House Committee on Flood Control, both adopted September 18, 1944.

*Existing project.—*No existing Federal flood control project at Guttenberg. Lock and dam No. 10 of upper Mississippi River navigation project is at Guttenberg. Local interests have constructed some local flood protection measures.

*Flood problem.—*Periodic high Mississippi River stages particularly in 1951 and 1952 have resulted in large expenditures for flood-fighting purposes and have caused extensive flood damages in the area.

*Recommended plan of improvement.—*A north levee about 3,040 feet long, a south levee about 2,000 feet long, a pumping plant, and appurtenant works.

*Estimated cost (price level of January 1960).—*

Federal .....	\$729, 000
Non-Federal .....	84, 000
<b>Total .....</b>	<b>813, 000</b>

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$26, 800	\$4, 330	\$31, 130
Maintenance and operation.....		1, 670	1, 670
<b>Total.....</b>	<b>26, 800</b>	<b>6, 000</b>	<b>32, 800</b>
Annual benefits: Damages prevented.....			38, 700

*Benefit-cost ratio.—*1.2.

*Local cooperation.—*Provide all lands, easements, and rights-of-way necessary for the construction of the project; hold and save the United States free from damages due to the construction works; maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; make any necessary alterations to utilities, culverts for interior drainage, roads, and highways including necessary widening of levees to provide for roadways where required, and provision of the necessary freeboard on streets and alley portions if and when needed; and obtain appropriate legal control



over pondage areas and prevent encroachment in such areas until substitute areas or equivalent pump or outlet capacity have been provided.

*Comments of the State and Federal Agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

State of Iowa: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.—*The recommended improvements would reduce the annual flood damages in the area. The committee considers this project economically justified and recommends its adoption.

MISSISSIPPI RIVER BETWEEN STE. GENEVIEVE AND ST. MARYS, MO.

(H. Doc. 519, 87th Cong.)

*Location.—*States of Missouri and Illinois along right bank of Mississippi River between river miles 110.5 and 123.0 above the mouth of the Ohio River.

*Authority.—*Resolution of the Committee on Flood Control, House of Representatives, adopted July 3, 1945.

*Existing project.—*The 1936 Flood Control Act authorized raising the existing levee of the Ste. Genevieve Levee District No. 1. No work was done under this authority. The 1944 Flood Control Act authorized inclusion of Common Big Field in the project although all at a lesser degree of protection. No work started pending completion of this report. The 1938 Flood Control Act authorized protection of the Kaskaskia Island Drainage and Levee District. Work completed in August 1942. Completed upstream reservoirs reduce stages about 1.4 feet.

*Flood problem.—*Approximately 90 percent of the 17,840 acres in the area under consideration are subject to frequent flooding by the Mississippi River, Saline River and River aux Vases. The land is primarily agricultural.

*Recommended plan of improvement.—*Raise the existing Kaskaskia Island Drainage and Levee District levee about 6 feet above its present height of about 13 feet. This would be raised to the design grade established and approved for Mississippi River agricultural levees in 1944.

*Estimated cost (price level of January 1961).—*

Federal .....	\$2, 500, 000
Non-Federal .....	110, 000
<b>Total .....</b>	<b>2, 610, 000</b>

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$95, 000	\$4, 900	\$99, 900
Maintenance and operation.....		2, 700	2, 700
Loss of productivity.....		1, 300	1, 300
<b>Total.....</b>	<b>95, 000</b>	<b>8, 900</b>	<b>103, 900</b>
Annual benefits: Damages prevented.....			113, 500

*Benefit-cost ratio.—*1.1.

*Local cooperation.*—(a) Provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project; (b) Hold and save the United States free from damages due to the construction works; and (c) Maintain and operate the project after completion in accordance with regulations prescribed by the Secretary of the Army.

*Comments of the State and Federal agencies.*—

State of Missouri: Favorable.

State of Illinois: Favorable.

Department of Interior: Favorable.

Department of Agriculture: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The project would serve to reduce flooding on several thousand acres of well-developed agricultural land. The committee finds the project justified and the requirements of local cooperation appropriate. Adoption of the project is warranted, and recommended by the committee.

#### HARRISONVILLE AND IVY LANDING DRAINAGE AND LEVEE DISTRICT NO. 2, ILLINOIS

(H. Doc. 542, 87th Cong.)

*Location.*—Harrisonville and Ivy Landing Drainage and Levee District No. 2, including Moredock and Ivy Landing Drainage District No. 1, lies in the Mississippi River floodplain in Monroe County, Ill., between river miles 141 and 156 above the Ohio River.

*Authority.*—House Public Works Committee resolution adopted June 17, 1948. Senate Public Works Committee resolution adopted July 18, 1959.

*Existing project.*—The existing Federal project for Harrisonville and Ivy Landing Drainage and Levee District No. 2 provides for raising and enlarging 21.4 miles of riverfront and flank levee and constructing appurtenant works, including eight gravity drainage structures. Construction of the work was completed in 1957.

*Flood problem.*—Although the menace of direct flooding from the Mississippi River has been largely eliminated by levees, there remains the problem of removing impounded interior drainage. The sources of the impounded water are precipitation on the protected low lands, accumulation of runoff from tributary hill lands, and seepage from the Mississippi River. Most of the accumulated water collects near the middle third and lower end of the district.

*Recommended plan of improvement.*—Provide pumping plants adjacent to the gravity outlets of Maeystown Creek and Fountain Creek. The greatest excess of benefits over costs would be realized with pumping capacities of 600 and 30 cubic feet per second, respectively. Raise the grade of the levee for 1,000 feet on each side of the pumping plants to prevent possible overtopping and crevassing in the immediate vicinities.

*Estimated cost (price level, July 1960).*—

Federal .....	\$1, 112, 000
Non-Federal .....	700
Total .....	1, 112, 700



*Project economics.*—

	Non-Federal	Total
Annual charges:		
Interest and amortization.....		\$42,800
Maintenance, operation, and major replacement.....	\$28,800	28,800
Total.....	28,800	71,600
Annual benefits:		
Damages prevented.....		110,000
Increased land use.....		36,500
Total.....		146,500

*Benefit-cost ratio.*—Maeystown Creek, 2.1; Fountain Creek, 1.7.

*Local cooperation.*—(a) Provide without cost to the United States all lands, easements, and rights-of-way for the construction of the project; (b) hold and save the United States free from damages due to the construction works; (c) maintain and operate the project, including the pumping plants, after completion in accordance with regulations prescribed by the Secretary of the Army; and (d) prevent encroachment on improved channels and ponding areas and, if ponding areas and capacities are impaired, provide substitute storage capacity or equivalent pumping capacity promptly without cost to the United States.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—This project would provide for badly needed drainage on several thousand acres of highly productive land. The installation of pumping plants is amply justified and the requirements of local cooperation are proper. The committee urges adoption of the project.

## COLUMBIA DRAINAGE AND LEVEE DISTRICT NO. 3, ILLINOIS

(H. Doc. 543, 87th Cong.)

*Location.*—Mississippi River flood plain in Monroe County, Ill., between river miles 156 and 166 above the Ohio River.

*Authority.*—House and Senate Public Works Committee resolutions adopted June 17, 1948, and June 18, 1957, respectively.

*Existing project.*—The existing Federal project for Columbia Drainage and Levee District No. 3 provides for raising and enlarging 20.1 miles of river front and flank levee and constructing appurtenant works, including nine gravity-drainage structures. Construction of the work was essentially completed in 1958.

*Flood problem.*—Although the menace of direct flooding from the Mississippi River has been largely eliminated by levees, there remains the problem of removing impounded interior drainage. The sources of the impounded water are precipitation on the protected lowlands, accumulation of runoff from tributary hill lands, and seepage from the Mississippi River. The accumulated water collects near the middle third and lower end of the district. Under ordinary circum-



stances, this area is drained by Franey Lake ditch, Long Slash, Dogwood Slough, and Shehan Lake ditch.

*Recommended plan of improvement.*—The District engineer finds that the most suitable plan for reducing impoundment flooding would be to provide pumping plants adjacent to the outlets of Long Slash and Franey Lake ditch. Drainage from Shehan Lake ditch and Dogwood Slough would be diverted to Long Slash by ditches 1,300 and 1,200 feet in length. He finds that the greatest excess of benefits over costs would be realized with pumping capacities of 200 and 30 cubic feet per second, respectively. The district engineer proposes to raise the grade of the levee by 2 feet for a distance of 1,000 feet on each side of the pumping stations to prevent possible overtopping and crevassing in the immediate vicinities. Local interests would construct onfarm drainage ditches on about 700 acres of land.

*Estimated Cost (price level of January 1961).*—

Federal .....	\$986, 000
Non-Federal .....	6, 000
Total .....	992, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Long Slash ditch:			
Interest and amortization.....	\$31, 320	\$170	\$31, 490
Maintenance and operation.....		7, 700	7, 700
Major replacement.....		1, 660	1, 660
Loss of productivity.....		50	50
Total.....	31, 320	9, 580	40, 900
Franey Lake ditch:			
Interest and amortization.....	6, 735	85	6, 820
Maintenance and operation.....		3, 900	3, 900
Replacements.....		560	560
Loss of productivity.....		20	20
Total.....	6, 735	4, 565	11, 300

	Long Slash ditch	Franey Lake ditch	Total
Annual benefits:			
Damages prevented.....	\$33, 200 19, 700	\$8, 200 7, 500	\$41, 400 27, 200
Total.....	52, 900	15, 700	68, 600

*Benefit-cost ratio.*—Long Slash ditch, 1.3; Franey Lake Ditch, 1.4.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way for the construction of the project; hold and save the United States free from damages due to the construction works; maintain and operate the project, including the pumping plants, after completion in accordance with regulations prescribed by the Secretary of the Army; and prevent encroachment on

improved channels and ponding areas, and, if ponding areas and capacities are impaired, provide substitute storage capacity or equivalent pumping capacity promptly without cost to the United States.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: Favorable.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—This project would provide for badly needed drainage on several thousand acres of highly productive land. The installation of pumping plants is amply justified and the requirements of local cooperation are proper. The committee urges adoption of the project.

#### PRAIRIE DU PONT LEVEE AND SANITARY DISTRICT, ILLINOIS

(H. Doc. 540, 87th Cong.)

*Location.*—The district lies on the left bank of the Mississippi River between miles 166 and 175 above the mouth of the Ohio River.

*Authority.*—House Public Works Committee June 17, 1948, and August 20, 1957, Senate Public Works Committee July 18, 1957.

*Existing project.*—The existing Federal project for Prairie du Pont Levee and Sanitary District provides for raising and enlarging 15.2 miles of riverfront and flank levee and constructing appurtenant works, including nine gravity-drainage structures. The work was scheduled for completion in 1961. Nine main ditches and streams traverse the lowest portions of the area.

*Flood problem.*—Substantial and repetitive damages have occurred due to blocked interior drainage when stages on the Mississippi River exceeded 15 to 30 feet on the Market Street gage at St. Louis, Mo. Drainage would be blocked at least once almost every year, varying in duration from a few days to a maximum of 147 days. The Palmer Creek drainage area, the largest in the district, is affected by a river stage of 15 feet. Old Prairie du Pont Creek (east) area is affected by a river stage of 20 feet, and the remaining areas are affected by a river stage of 30 feet. Blocked drainage occurs generally during the planting season, March through July.

*Recommended plan of improvement.*—Provide pumping plants adjacent to the outlets of Palmer Creek, Old Prairie du Pont Creek (west), Falling Springs Ditch, and Old Prairie du Pont Creek (east). The greatest excess of benefits over costs would be realized with pumping capacities of 225, 35, 5, and 17 cubic feet per second, respectively. The district engineer proposes to raise the grade of the levee by 2 feet for a distance of 1,000 feet on each side of the pumping stations to insure against overtopping in the immediate vicinities.

*Estimated cost (price level July 1961).*—

Federal .....	\$921, 000
Non-Federal .....	4, 300
Total .....	925, 300

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	(1)	(1)	(1)
Maintenance and operations.....		\$16,800	
Total.....			\$52,100
Annual benefits:			
Damages prevented.....			157,800
Increased land use.....			53,800
Total.....			211,600

<sup>1</sup> Breakdown not available.

*Benefit-cost ratio.*—4.1.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way for the construction of the project; hold and save the United States free from damages due to the construction works; maintain and operate the project, including the pumping plants, after completion in accordance with regulations prescribed by the Secretary of the Army; and prevent encroachment on improved channels and ponding areas, and if ponding areas and capacities are impaired, provide substitute storage capacity or equivalent pumping capacity promptly without cost to the United States.

*Comments of the State and Federal agencies*—

Department of the Interior: No objection.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget*—No objection.

*Remarks.*—This project would provide for badly needed drainage on several thousand acres of highly productive land. The installation of pumping plants is amply justified and the requirements of local cooperation are proper. The committee urges adoption of the project.

RICHLAND CREEK, ILL.

(H. Doc. 571, 87th Cong.)

*Location.*—Richland Creek lies in Monroe, St. Clair, and Randolph Counties in southeastern Illinois.

*Authority.*—Senate Public Works Committee resolutions adopted September 16, 1948, and July 18, 1957, and House Public Works Committee resolution adopted August 20, 1957.

*Existing project.*—None.

*Flood problem.*—The urban area of the city of Belleville has experienced floods with some loss of life. The rural area (reach 3) is mainly agricultural and, being generally flat, floods with accompanying destruction of crops.

*Recommended plan of improvement.*—The district engineer has determined that the plan of improvement which would afford the greatest overall benefit to the Richland Creek Basin would consist of: (a) the two detention reservoirs proposed by the Soil Conservation Service; and (b) urban channel improvement of maximum capacity consistent with space limitations through Belleville, including necessary bridge modifications, and clearing, cleaning, and rectification of the



existing channel in the rural reach 3 by the Corps of Engineers. These improvements would provide protection against the standard project flood in the urban reach through Belleville and against the 2-year flood in reach 3.

*Estimated cost (price level of January 1961).—*

Federal .....	\$4, 995, 000
Non-Federal .....	574, 000
Total .....	5, 569, 000

*Project economics.—*

Annual charge .....	\$233, 400
Annual benefits:	
Damages prevented .....	273, 900
Other (enhancement) .....	36, 300
Total .....	310, 200

*Benefit-cost ratio.—1.3.*

*Local cooperation.*—(a) Provide without cost to the United States all lands, easements, and right-of-way necessary for construction of the project; (b) provide without cost to the United States all alterations of highways, highway bridges, utilities, and related facilities made necessary by construction of the project; (c) hold and save the United States free from damages due to the construction works; (d) maintain the improved channel after completion in accordance with regulations prescribed by the Secretary of the Army; (e) prevent encroachment on the improved channel; and (f) at least annually inform interests affected that the project will not provide protection in the agricultural reaches against major floods. Local interests are willing to furnish the requirements of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Agriculture: Favorable. Suggest coordination with Soil Conservation Service prior to construction.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget.—No objection.*

*Remarks.*—The committee notes that excellent coordination has been accomplished between the Corps of Engineers and the Soil Conservation Service in developing an overall plan of improvement for the area. The committee urges adoption of the recommended project.

SALT RIVER, MO.

(H. Doc. 507, 87th Cong.)

*Location.*—Salt River rises in Schuyler County, Mo., about 12 miles south of the Missouri-Iowa State line, and flows generally southeast about 192 miles to the Mississippi River near Louisiana, Mo. Joanna Dam would be located on Salt River about 16 miles southwest from Hannibal, Mo.

*Authority.*—Flood Control Act, June 22, 1936.

*Existing project.*—Food Control Act of 1936 authorized participation with the Riverland Levee District in levee construction adjacent to the mouth of Salt River. The River and Harbor Act of 1937 au-

thorized acquisition of lands damaged by flooding resulting from operation of Mississippi River navigation project. The Food Control Act of June 28, 1938, authorized the Joanna Dam project in connection with the general comprehensive plan for flood control and other purposes in the upper Mississippi River Basin. A Federal project provides for raising and enlarging approximately 14.6 miles of levee in the Riverland Levee District near the mouth of the river. The levee system, affording partial protection to about 5,800 acres, was built by local interests with Federal assistance. About 2,720 acres of lowlands near the mouth of Salt River, which were damaged by the Mississippi River navigation project, have been acquired by the United States.

*Flood problem.*—Rain storms cause the streams to rise rapidly. Flow usually returns to bank full within 3 to 4 days.

*Recommended plan of improvement.*—Construction of a dam and pumped power facilities to serve the functions of flood control, power, low-flow augmentation for Mississippi River navigation, water supply, recreation and fish and wildlife.

*Estimated cost (price level of January 1961).*—Federal, \$63,300,000.<sup>1</sup>

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$2, 485, 900	\$69, 000	\$2, 554, 900
Maintenance and operation.....	392, 400	7, 000	399, 400
Loss of taxes.....	187, 200		187, 200
Total.....	3, 065, 500	76, 000	3, 141, 500
Annual benefits: Damages prevented:			
Flood control.....			1, 317, 500
Navigation.....			3, 100
Power.....			1, 089, 700
Water supply.....			105, 000
Fish and wildlife.....			261, 500
Recreation.....			1, 380, 000
Total.....			4, 156, 800

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Pay \$1,908,000 toward construction costs and \$7,000 annually for operation and maintenance and replacements as allocated to local interests because of water supply.

*Comments of States and Federal agencies.*—

State of Missouri: Favorable.

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Federal Power Commission: Favorable.

Department of Health, Education, and Welfare: Favorable.

Department of Commerce: Favorable.

*Comments of the Bureau of the Budget.*—No objection to submission of report to Congress. However, the Bureau of the Budget notes that a substantial proportion of the benefits used to justify the project result from fish and wildlife and general recreation, and that the

<sup>1</sup> \$1,908,000 to be repaid by local interests for water supply.

recently approved administration standards for the formulation and evaluation of water resources projects provide appropriately for the consideration of these purposes. The Bureau states that consideration is currently being given to the problems of cost allocation and of reimbursement and cost-sharing between the Federal Government and non-Federal bodies—matters not dealt with fully in the policies and standards recently approved by the President, and that there is also under consideration the development of detailed standards to supplement the new principle for estimating recreation benefits, including those derived from the recreational aspects of fish and wildlife. Accordingly, the Bureau would expect that prior to any requests for funds to initiate construction of this project, it would be reevaluated in the light of the administration's standards and policies applicable at that time.

*Remarks.*—This worthy project would serve numerous useful purposes including flood control, hydroelectric power, water supply, fish and wildlife, and recreation. The committee notes that the project is amply justified and urges its adoption.

#### PECATONICA RIVER, ILL. AND WIS.

(H. Doc. 539, 87th Cong.)

*Location.*—In south-central Wisconsin and north-central Illinois.

*Authority.*—Flood Control Act of 1946.

*Existing project.*—An authorized local protection project at Freeport, Ill.

*Flood problem.*—This basin is subject to flooding during all seasons of the year.

*Recommended plan of improvement.*—Consists of about 6,000 feet of channel improvement, 4,500 feet of levee, 780 feet of concrete flood-wall, three closure structures, a pumping plant, drainage facilities, and modification of a highway bridge.

*Estimated cost: (price level).*

Federal .....	\$850, 000
Non-Federal .....	182, 000
Total .....	1, 032, 000

#### *Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization .....	\$31, 400	\$8, 500	\$39, 900
Maintenance and operation .....		3, 200	3, 200
Total .....	31, 400	11, 700	43, 100
Annual benefits: Damages prevented .....			45, 100

*Benefit-cost ratio.*—1.05.

*Local cooperation.*—Provide all lands, easements, and rights-of-way, including borrow areas and spoil-disposal areas, necessary for the construction of the project; accomplish all relocations and alterations of buildings, utilities, highway bridges, roads, and other facilities necessary for construction of the project; hold and save the United States free from damages due to the construction works;



maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; prevent any encroachment on the flood channels and ponding areas which would decrease the effectiveness of the flood control improvements, and if ponding areas and capacities are impaired, promptly provide substitute storage capacity or equivalent pumping capacity; and at least annually notify those affected that the project will not provide complete flood protection.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable:

State of Illinois: Favorable.

State of Wisconsin: Favorable.

*Comments of Bureau of the Budget.—*No objection.

*Remarks.—*The committee considers that the proposed project for Darlington is urgently needed and should be adopted at this time, although the benefit-to-cost ratio is marginal.

### ROCK RIVER, ROCKFORD, ILL.

(S. Doc. 142, 87th Cong.)

*Location.—*The city of Rockford is situated along both banks of Rock River about 17 miles south of the Illinois-Wisconsin State boundary.

*Authority.—*Senate Public Works Committee resolution adopted March 31, 1953.

*Existing project.—*There are no authorized Corps of Engineers flood control projects at Rockford.

*Flood problem.—*Areas in Rockford and vicinity suffering greatest flood damages are along both the North and South Branches of Kent Creek and along Keith Creek within the city. Since early 1926, about nine major floods have occurred in the Rockford area.

*Recommended plan of improvement.—*Consist of channel enlargement and realignment, levees, and appurtenant works on the North Branch Kent Creek and in the portion of Kent Creek below the confluence of the North and South Branches; a relief channel to divert a portion of the flood flows of the South Branch Kent Creek to Rock River, and channel improvements on South Branch downstream from the point of diversion.

*Estimated cost: (price level of 1960).—*

Federal .....	\$7, 228, 000
Non-Federal .....	1, 068, 000
<b>Total .....</b>	<b>8, 296, 000</b>

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$263, 200	\$300	\$263, 500
Maintenance and operation.....	49, 700	11, 300	61, 000
Loss of productivity.....		6, 200	6, 200
<b>Total .....</b>	<b>312, 900</b>	<b>17, 800</b>	<b>330, 700</b>
Annual benefits: Damages prevented.....			683, 500

*Benefit-cost ratio.—*2.1.

*Local cooperation.*—Provide without cost to the United States all lands, easements, rights-of-way, and spoil-disposal areas necessary for construction of the project; hold and save the United States free from damages due to the construction works; bear the costs of all relocation and alterations of bridges, buildings, structures, sewers, utilities, and other improvements, except railroad bridges and approaches, made necessary by construction of the project; maintain the works after completion in accordance with regulations prescribed by the Secretary of the Army; and prescribe and enforce regulations to prevent encroachments on the improved channels and on ponding areas.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—Since early 1926, about nine major floods have occurred in the Rockford area. The most recent major damaging flood in the area occurred in July 1952 when at least 1,000 persons evacuated their residences for several days. A recurrence of the July 1952 flood under present conditions would cause damages estimated at \$2,260,000 in the Kent Creek Basin. The benefits amply justify a project at Rockford.

#### MISSISSIPPI RIVER, URBAN AREAS FROM HAMPTON, ILL., TO MILE 300

(H. Doc. 564, 87th Cong.)

*Location.*—The reach of the Mississippi River under consideration is that between river miles 300 and 492 in Illinois, Missouri, and Iowa.

*Authority.*—Two resolutions by House Committee on Flood Control, both adopted September 18, 1944.

*Existing project.*—The Corps of Engineers projects pertinent to this study are the Coralville Reservoir on the Iowa River (in operation), the Red Rock Reservoir in Des Moines River (under construction), the Saylorville Reservoir on Des Moines River (in the planning stage), and several local protection projects for urban and rural areas.

*Flood problem.*—Recent floods occurred in 1951, 1952, and 1960, with maximum flows of 225,000 cubic feet per second at Clinton, about 290,000 cubic feet per second at Keokuk, and 324,000 cubic feet per second at Hannibal. Floods are of comparatively long duration, and cause extensive damage. Flooding in the reach occurs on the average of once every 2 years.

*Recommended plan of improvement.*—Improvements for flood control along the Mississippi River at Rock Island, Ill.; Hannibal, Mo.; and Gregory Drainage District, Mo.; consisting of levees, floodwalls, gated drainage structures, pumping plants, railroad adjustments and appurtenant works. Any one of the three units may be undertaken independently of the others.

*Estimated cost (May 1961 price level).*—

Federal	----- <sup>1</sup> \$9, 289, 000
Non-Federal	----- 634, 000
Total	----- 9, 923, 000

<sup>1</sup> \$3,850,000 for Rock Island, \$4,394,000 for Hannibal, and \$1,045,000 for Gregory Drainage District.



*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$344,500	\$30,700	\$375,200
Maintenance and operation.....		50,900	50,900
Total.....	344,500	81,600	426,100
Annual benefits: Flood damages prevented.....		577,300	

*Benefit-cost ratio.*—1.3 (Rock Island, 1.4; Gregory Drainage District, 2.0; and Hannibal, 1.2)

*Local cooperation.*—Provide all lands, easements, and rights-of-way; modify or relocate facilities, except railroads; hold and save the United States free from damages; maintain and operate the completed works; and at Hannibal, prevent encroachment on the ponding area adjacent to the pumping station. Local interests will provide the required cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

State of Missouri: Favorable.

State of Iowa: Favorable.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee notes that improvements for flood control along the Mississippi River at Rock Island, Ill., Hannibal, Mo., and Gregory Drainage District, Mo., are amply justified.

## MISSISSIPPI RIVER URBAN AREAS FROM HAMPTON, ILL., TO CASSVILLE, WIS.

(H. Doc. 450, 87th Cong.)

*Location.*—The reach of the Mississippi River from Hampton, Ill., mile 491.8, to the vicinity of Cassville Wis., mile 606.7, above the mouth of the Ohio River.

*Authority.*—This interim report is in partial response to two resolutions adopted September 18, 1944, by the Committee on Flood Control of the House of Representatives.

*Existing project.*—The only existing Corps of Engineers local flood control project in this reach is a levee with appurtenant works to protect the town of Sabula, Iowa. Construction was completed in November 1957, at a Federal cost of \$411,915.

*Flood problem.*—The flood plain in the reach of the Mississippi River considered in this report contains 17 urban areas. The problem is the reoccurring flood damage in these urban areas. Ten major floods of record occurred during the period 1880 to 1954. Average annual flood damages under present conditions of development at the communities investigated are estimated at \$1,336,800, of which 90 percent are at Dubuque and Clinton.

*Recommended plan of improvement.*—The plan provides for improvements for flood control at Dubuque, Iowa, consisting of levees, floodwalls, and appurtenant works, including a navigation opening at the mouth of Dubuque Harbor.



*Estimated cost (price level, July 1959).—*

Federal .....	\$5,350,000
Non-Federal .....	150,000
<b>Total</b> .....	<b>5,500,000</b>

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization .....	\$200,900	\$7,350	\$208,250
Maintenance and operating .....		12,750	12,750
<b>Total</b> .....	<b>200,900</b>	<b>20,100</b>	<b>221,000</b>
<b>Annual benefits: Damages prevented</b> .....			<b>291,400</b>

*Benefit-cost ratio.—1.3.*

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way necessary for the construction of the project; hold and save the United States free from damages due to the construction works; maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; modify or relocate buildings, utilities, sewers, and other facilities where necessary in the construction of the project, including necessary widening of levees to provide for roadways; and obtain legal control over pondage areas and prevent encroachment until substitute pondage or increased pumping capacity has been provided at local expense. Officials of the city of Dubuque have indicated their willingness to comply with the items of local cooperation.

*Comments of the States and Federal agencies.—*

State of Illinois: Favorable.

State of Iowa: Favorable.

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.*—The committee notes that the proposed improvements for flood control at Dubuque, Iowa, are economically justified and urgently needed.

KICKAPOO RIVER, WISCONSIN

(H. Doc. 557, 87th Cong.)

*Location.*—The Kickapoo River rises in Monroe County in southwestern Wisconsin and flows south and southwest through Vernon, Richland, and Crawford Counties, and empties into the Wisconsin River near Wauzeka, about 16 miles upstream from the junction of the latter stream with the Mississippi River.

*Authority.*—Section 6 of the Flood Control Act of June 22, 1936, as amended by section 5 of the Flood Control Act approved August 28, 1937.

*Existing project.*—There are no existing flood control projects in the river basin. The Soil Conservation Service has constructed two runoff retarding dams on the headwaters of the West Branch of the Kickapoo River under the pilot watershed program.

*Flood problem.*—The Kickapoo Valley is subject to a destructive flood practically every year. About 13,000 acres of agricultural lands and eight urban areas below La Farge sustain damage during major floods. Average annual damages are \$765,000, of which approximately 50 percent are urban. Recurrence of the July 1951 flood would cause damages totaling \$1,900,000.

*Recommended plan of improvement.*—A dam and reservoir on Kickapoo River about 1 mile upstream from the village of La Farge, operated for flood control, fish and wildlife conservation, general recreation, and a reduction in aggradation downstream from the reservoir. The reservoir would have a total capacity of 75,000 acre-feet at the maximum pool of the spillway design flood, 66,000 acre-feet for the reservoir design flood, and 10,250 acre-feet for the conservation pool. About 14.5 miles of channel enlargement would be required for suitable operation of the reservoir. Supplemental flood protection would be provided at Soldiers Grove by the construction of a levee extending along the right bank about 3,200 feet long and a levee on the left bank about 2,800 feet. A short levee embankment about 70 feet long would be provided at the upstream end of the former railroad cut near the north limits of the village. Interior drainage would be pumped. Two bridges would be raised and the channel enlarged near the bridges. Supplemental flood protection would be provided at Gays Mills by construction of a levee on the left bank of about 6,000-foot length which would surround the built-up portion of Gays Mills on three sides. Interior drainage would be ponded and pumped. The highway bridge would be raised and the channel would be enlarged.

*Estimated cost.*—(price level of December 1960).—

	La Farge Dam and Reservoir	Soldiers Grove levee	Gays Mills levee	Total
Federal.....	\$14,894,000	\$271,000	\$405,000	\$15,570,000
Non-Federal.....	0	190,000	142,000	332,000
Total.....	14,894,000	461,000	547,000	15,902,000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
La Farge Reservoir.....	\$484,800		\$484,800
Soldiers Grove levees.....	7,900	\$9,200	17,100
Gays Mills levee.....	11,700	7,800	19,500
Total.....	504,400	17,000	521,400

	Flood control	General recreation	Fish and wildlife	Total
Annual benefits:				
La Farge Reservoir.....	\$488,100	\$112,800	\$11,000	\$611,900
Soldiers Grove levees.....	22,000			22,000
Gays Mills levee.....	32,400			32,400
Total.....	542,500	112,800	11,000	666,300

*Benefit-cost ratio.*—La Farge Reservoir, 1.3; Soldiers Grove levees, 1.3; Gays Mills levee, 1.7; overall 1.3.

*Local cooperation.*—Prior to construction of levees at Soldiers Grove and Gays Mills, local interests agree to provide all lands, easements, and rights-of-way necessary for construction of the project; hold and save the United States free from damages due to the construction works; maintain and operate each usable element of the work after completion and all of the works after completion thereof in accordance with regulations prescribed by the Secretary of the Army; make all necessary relocations of buildings, utilities, highway bridges, sewers, roads, and other structures required in connection with the work; and prevent encroachments on improved channels, floodways, and ponding areas unless and until substitute storage capacity or equivalent pumping capacity is provided without cost to the United States. Local interests have indicated willingness and ability to furnish required cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Wisconsin: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee notes the favorable benefit-cost ratios for each proposed project, and recommends authorization.

#### WARROAD RIVER AND BULL DOG CREEK, MINN.

(H. Doc. 449, 87th Cong.)

*Location.*—In north-central Minnesota near the international boundary. Warroad River flows into Lake of the Woods, a boundary lake which is a part of the Hudson Bay drainage system. Bull Dog Creek is a principal tributary of Warroad River.

*Authority.*—Flood Control Act, approved December 22, 1944.

*Existing project.*—No existing Federal project for flood control. Local interests have constructed numerous drainage ditches throughout the basin.

*Flood problem.*—Agricultural development is greatly hampered by flooding.

*Recommended plan of improvement.*—Construction of 34 miles of channel improvement along Warroad River, East Branch, Bull Dog Creek, county ditch No. 10, and county ditch No. 6, and appurtenant works.

*Estimated cost (price level of April 1960).*—

Federal .....	\$972, 000
Non-Federal .....	367, 000
Total .....	1, 339, 000



*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$36,500	\$17,600	\$54,100
Maintenance and operation.....		6,800	6,800
Total.....	36,500	24,400	60,900
Annual benefits:			
Flood damages prevented.....			79,500
Increased land use.....			22,200
Total.....			101,700

*Benefit-cost ratio.*—1.7.

*Local cooperation.*—Contribute in cash or equivalent construction work 9.9 percent of the gross Federal construction cost (exclusive of county ditch No. 6), an amount presently estimated at \$93,000, to be paid either in a lump sum prior to start of construction, or in installments prior to start of pertinent work items in accordance with construction schedules as required by the Chief of Engineers, the final contribution to be determined after actual costs are known; provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project including changes to highway channel crossings and miscellaneous utilities; hold and save the United States free from damages due to the construction works; maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; prevent encroachment on the proposed rights-of-way and improved channels; provide an organization capable of furnishing the required local cooperation; and construct and maintain the associated drainage works needed to effectively use the improved outlet system. It is considered that local interests are financially able and willing to meet all conditions of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

State of Minnesota: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee believes that the project is well justified, and recommends its authorization.

## RIVER ROUGE, MICHIGAN

(H. Doc. 148, 87th Congress)

*Location.*—The River Rouge basin is located in the southeastern corner of the lower peninsula of the State of Michigan and lies within the counties of Wayne, Oakland, and Washtenaw. The basin is fan shaped and extends about 24 miles from north to south and about 33 miles from east to west.

*Authority.*—Flood Control Act approved June 30, 1948.

*Existing project.*—None.

*Flood problem.*—An investigation of the flood problems of the River Rouge and its tributaries indicates that the reaches upstream of Michigan Avenue experience annual flooding. The flood of April 1947, the largest of record, inundated the utility tunnels of the Ford Motor Co. plant, employing 40,000 persons, and caused complete shut-down of the plant. Average annual flood damages in the reach below Michigan Avenue, adjusted for future conditions, are estimated at \$853,000.

*Recommended plan of improvement.*—Improvement of River Rouge, Mich., for flood control, by channel straightening and enlargement from Michigan Avenue to the navigation turning basin:

*Estimated cost (price level of December 1959).—*

Federal .....	\$8, 659, 000
Non-Federal .....	10, 877, 300
<b>Total .....</b>	<b>19, 536, 300</b>

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$314, 200	\$421, 700	\$735, 900
Maintenance and operation.....	0	25, 000	25, 000
<b>Total.....</b>	<b>314, 200</b>	<b>446, 700</b>	<b>76, 900</b>
Annual benefits:			
Damages prevented.....			820, 600
Other; Savings to local interests in future sewer constructions.....			98, 700
<b>Total.....</b>			<b>919, 300</b>

*Benefit-cost ratio.*—1.2.

*Local cooperation.*—(a) Furnish without cost to the United States all lands, easements, rights-of-way, and suitable spoil-disposal areas necessary for construction of the project; (b) hold and save the United States free from damages due to the construction works; (c) maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; (d) prescribe and enforce regulations satisfactory to the Secretary of the Army designed to prevent encroachments on the proposed rights-of-way and the improved channel, and to keep non-pile-supported bank loads a minimum distance of 50 feet from the top of the bank; (e) construct new highway bridges as required; and (f) make all alterations and additions to highway bridges, utility crossings, sewer outlets, and interfering structures within the proposed channel rights-of-way. Local interests have indicated ability and willingness to furnish requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee notes that the non-Federal cost exceeds the Federal cost and that local interests have indicated ability and willingness to furnish the required items of local cooperation. The committee believes that the project is urgently needed and that the requirements of local cooperation are in line with other similar projects.

#### SANDUSKY RIVER, OHIO

(S. Doc. 136, 87th Cong.)

*Location.*—The Sandusky River is located in north-central Ohio. The river rises in Richland County, flows generally northwestward and empties in the western end of Sandusky Bay, an arm of Lake Erie, about 70 miles west of Cleveland.

*Authority.*—Partial response to a resolution by the Committee on Public Works of the U.S. Senate adopted on February 24, 1948.

*Existing project.*—There are no existing Federal improvements for flood control in the basin.

*Flood problem.*—Flood problems in the Sandusky River Basin are due principally to development of flood plain areas without provision of alternate routes in floodflows. The channel is not sufficiently large to contain high discharges, and ice jams which frequently form on the lower portions of the river result in high stages at Fremont.

*Recommended plan of improvement.*—Provides for channel widening, deepening, and straightening together with levees, floodwalls, and appurtenant works at Fremont, Ohio.

*Estimated cost (price level, March 1961).*—

Federal .....	\$4, 300, 000
Non-Federal .....	490, 000
Total .....	4, 790, 000

#### *Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization .....	\$127, 300	\$20, 800	\$148, 100
Maintenance and operation .....		14, 000	14, 000
Surveys and inspection .....	200		200
Total .....	127, 500	34, 800	162, 300
Annual benefits:			
Damages prevented .....			283, 500

*Benefit-cost ratio.*—1.7.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way, including borrow and sump areas, necessary for construction of the project; hold and save the United States free from damages due to the construction works; accomplish all relocations and alterations of streets, buildings, pipelines, utilities, bridges, and other structures (except railroad facilities) made necessary by the construction work; maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; prescribe and enforce regulations to prevent



encroachment on channels, rights-of-way, and ponding areas necessary to proper functioning of the project; and at least annually inform interests affected that the proposed improvements will not provide protection against floods of a magnitude equivalent to that of March 1913. Local interests have indicated willingness and ability to furnish local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

State of Ohio: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—Flood protection to the city of Fremont will be provided by construction of the recommended project. The committee believes the project of an urgent nature, well justified, and recommends its authorization.

#### GILA RIVER, ARIZ., CAMELSBACK RESERVOIR

(S. Doc. 127, 87th Cong.)

*Location.*—The Camelsback damsite is located on the Gila River about 24 river miles upstream from the town of Safford in southwestern Arizona.

*Authority.*—Flood Control Act of 1938 and Senate Public Works Committee Resolution adopted August 7, 1956.

*Existing project.*—The authorized Federal improvement for Gila River above Coolidge Dam provides for channel clearing through the Safford Valley for flood control and water conservation. Construction work has not been initiated. The improvement would provide partial protection from floods in Safford Valley, and would increase the water supply for agriculture by the removal of phreatophytic growth. Coolidge Dam, completed by the U.S. Indian Irrigation Service in 1928, formed the San Carlos Reservoir with an initial storage capacity of 1,242,000 acre-feet for water conservation and flood control.

*Flood problem.*—Floods have resulted in the loss of many lives and have caused severe damage to rural residences, crops, irrigation works, and highways. Of the 22,500 acres subject to flooding along the Gila River from the head of Safford Valley to San Carlos Reservoir, 12,800 acres are cultivated.

*Recommended plan of improvement.*—An earth and rockfill dam with an ungated outlet on Gila River at the Camelsback site about 8 miles upstream from the head of Safford Valley, to form a reservoir with a capacity of 283,000 acre-feet of which 133,000 acre-feet would be for flood control and 150,000 for sediment. Construction is not to be initiated until construction of the channel improvement, authorized by 1958 Flood Control Act is assured.

*Estimated cost.*—(price level, October 1959).

	Camelsback Reservoir	Authorized channel clearing	Total
Federal.....	\$9, 770, 000	\$1, 130, 000	\$10, 900, 000
Non-Federal.....		270, 000	270, 000
Total.....	9, 770, 000	1, 400, 000	11, 170, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Camelsback Reservoir:			
Interest and amortization.....	\$374, 000		\$374, 000
Maintenance and operation.....	10, 000		10, 000
Total.....	384, 000		384, 000
Authorized channel clearing:			
Total (Including \$50,000 for non-Federal maintenance).....			106, 000
Total project.....			490, 000
Annual benefits:			
Camelsback Reservoir:			
Damages prevented.....			190, 000
Water conservation.....			
Total.....			190, 000
Authorized channel clearing:			
Damages prevented.....			98, 000
Water conservation.....			275, 500
Total.....			373, 500
Total project.....			563, 500

*Benefit-cost ratio.—1.2.*

*Local cooperation.*—Hold and save the United States free from damages due to the construction, maintenance, and operation of the dam and reservoir, including damages arising from water-rights claims; establish and enforce floodway limits and regulations to prevent encroachment on the channel between Camelsback damsite and Brown canal heading, at the head of Safford Valley, and maintain the present river-channel carrying capacity. Local interests have indicated willingness to meet requirements of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Arizona: Favorable.

State of California: Favorable.

State of New Mexico: Makes several comments pointing out that optimum development cannot be planned wisely before the final decree is entered in the U.S. Supreme Court litigation, *Arizona v. California* et al. The Chief of Engineers has replied indicating that the proposed Camelsback Reservoir would lie entirely within the State of Arizona downstream of the State of New Mexico and would have no adverse effects on New Mexico land or water rights.

*Comments of the Bureau of the Budget.*—No objection. However, the Bureau believes that, prior to any request for funds to construct the reservoir, its necessity and economic justification should be examined after accomplishment of the related channel improvement and operation for a sufficient period of time to evaluate its effectiveness in the area.



*Remarks.*—The committee considers it highly desirable to construct the proposed dam at the Camelsback site on Gila River in order to prevent damages from floods which, in the past, have resulted in the loss of many lives and have caused severe damages to rural residences, crops, irrigation works, and highways.

Local interests desired a reservoir for flood control, water conservation and recreation. The Corps has recommended construction of an ungated flood control dam since storage in the upper basin is not compatible with the provisions of the Gila decree.

In order to meet the desires of local interests, so far as possible, the Corps designed an ungated structure that can be gated at a later date if the Gila decree is modified.

The committee recommends that if at a later date, under a modified Gila decree, storage for water conservation, recreation or any other purpose appears feasible, the installation of gates should be specifically authorized by the Congress, based on a formal report. In accordance with the provisions of section 1 of the 1944 Flood Control Act, that report would, of course, have to be submitted to affected States and interested Federal agencies for comment.

#### GILA RIVER BELOW PAINTED ROCK RESERVOIR, ARIZ.

(S. Doc. 116, 87th Cong.)

*Location.*—Gila River rises in southwest New Mexico. It flows generally westward about 650 miles and enters the Colorado River about 3 miles upstream from Yuma, Ariz.

*Authority.*—Senate Public Works Committee resolution adopted August 30, 1954.

*Existing project.*—The only Corps of Engineers flood-control project related to the reach under consideration is Painted Rock Dam and Reservoir located at river mile 126. The Bureau of Reclamation has constructed 57 miles of dikes along the Gila irrigation project, and six floodways to pass floodflows diverted by dikes to the Gila River. Flood control improvements below Gila siphon have been approved for construction by the Bureau. Non-Federal interests constructed 16 miles of levee along the Gila River in the vicinity of Roll, Ariz., and cleared the channel of phreatophytic growth from Texas Hill to Gila siphon. These works have not been maintained and are now ineffective.

*Flood problem.*—Painted Rock Reservoir provides some control for major floods originating upstream; however, releases from the reservoir and floods originating downstream are a potential source of extensive damages to lands and improvements in the 115,000-acre Gila irrigation project. The channel capacity is low because of silt deposits from tributary streams, and phreatophytic growth. Potential flood damage below Painted Rock Dam has been greatly increased as a result of the recent construction of irrigation works and related land reclamation on the Gila flood plain.

*Recommended plan of improvement.*—Improvement of Gila River, Ariz., for flood control by channel improvement and construction of levees below Painted Rock Dam in the reach between Texas Hill and Gila siphon.



*Estimated cost (November 1959 price level).*

Federal .....	\$18, 255, 000
Non-Federal .....	700, 000
Total .....	18, 955, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization .....	\$665, 000	\$39, 000	\$704, 000
Maintenance and operation .....	0	100, 000	100, 000
Total .....	665, 000	139, 000	804, 000
Annual benefits: Damages prevented .....			2, 473, 000

*Benefit-cost ratio.—3.1.*

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project; perform without cost to the United States all necessary relocations of highways, roads, bridges, irrigation and drainage facilities, and other utilities required in connection with construction of the works; hold and save the United States free from damages due to the construction works; and maintain and operate the project after completion. Local interests are willing to meet the requirements of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education and Welfare: Favorable.

International Boundary and Water Commission: Favorable.

State of Arizona: Favorable.

*Comments of the Bureau of the Budget.—No objection.*

*Remarks.*—The committee notes that potential flood damages below Painted Rock Dam have been greatly increased as a result of recent irrigation works and land reclamation in the Gila River flood plain. The proposed project would alleviate floods originating downstream from Painted Rock Reservoir which are a potential source of extensive damages to lands and improvements. The project is well justified and construction is desirable.

## PINAL CREEK, ARIZ.

(H. Doc. 512, 87th Cong.)

*Location.*—Pinal Creek watershed is a subbasin of the Gila River, situated in Gila County in south-central Arizona about 75 miles east of Phoenix. The elongated 200-square-mile watershed drains into Salt River above Roosevelt Dam. The Pinal Creek Basin under detailed consideration is the 33-square-mile drainage area of Pinal Creek at and above Globe, Ariz.

*Authority.*—1938 Flood Control Act.

*Existing project.*—There are no existing Federal projects for flood control or beneficial use of water in the area. Some stream improvements for reducing flood damages have been constructed by local inter-

ests but they are not effective in controlling large floods along the main streams.

*Flood problem.*—The greatest floods in the area are caused by local summer thunderstorms of high intensity and short duration. The characteristics of such storms, combined with the steep slopes and stream grades, cause rapid concentration of floodflows. As a result, the communities located in the narrow valleys receive heavy damages.

*Recommended plan of improvement.*—Construction of about 9,000 feet of concrete-lined channel along Pinal Creek at Globe, Ariz. The plan requires the replacement of four highway bridges and the alteration of two railroad bridges.

*Estimated cost (1960 price level.)*—

Federal .....	<sup>1</sup> \$1, 300, 000
Non-Federal .....	360, 000
<b>Total .....</b>	<b>1, 660, 000</b>

<sup>1</sup> Excludes \$40,000 for preauthorization studies.

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization .....	\$48, 000	\$17, 000	\$65, 000
Maintenance and operation .....		3, 000	3, 000
<b>Total .....</b>	<b>48, 000</b>	<b>20, 000</b>	<b>68, 000</b>
Annual benefits:			
Damages prevented .....			85, 000
Advance bridge replacement .....			4, 000
<b>Total .....</b>			<b>89, 000</b>

*Local cooperation.*—Provide lands, easements, and rights-of-way, including borrow areas and spoil-disposal areas. Accomplish all modifications or relocations of existing utilities, roads, and bridges, except railroad bridges; hold and save the United States free from damages due to the construction works; maintain and operate all the works after completion; prevent any encroachment upon the improved channel which would reduce its flood-carrying capacity; and, at least annually, notify interests affected that the project will not provide complete flood protection. Local interests have indicated a willingness to provide the necessary local cooperation.

*Comments of State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Public Health Service: Favorable.

State of Arizona: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee favors the proposed plan for improvement of Pinal Creek, to provide protection for the town of Globe from high-intensity thunderstorms which cause heavy damages in the narrow valley.

## TRUCKEE RIVER AND TRIBUTARIES, CALIFORNIA AND NEVADA

(H. Doc. 435, 87th Cong.)

*Location.*—The Truckee River Basin, in northeastern California and Western Nevada, originates at the outlet of Lake Tahoe, flows for 110 miles generally north and east and terminates in Pyramid Lake, Nev.

*Authority.*—1938 Flood Control Act.

*Existing project.*—Existing flood control improvements by the Corps of Engineers consist of channel clearing and snagging through the city of Reno upstream to the California-Nevada State line. Enlargement of the outlet channel at Lake Tahoe and 7.5 miles of channel improvements downstream from Reno are under construction. Bureau of Reclamation improvements include controlled storage in Lake Tahoe for irrigation and power, completed in 1915; the Boca Reservoir, completed in 1939, on Little Truckee River for irrigation; and the authorized multiple-purpose reservoirs at the Stampede site on Little Truckee River and the Prosser Creek site.

*Flood problem.*—Floods caused by rainfall from November through March and characterized by high peaks and short durations result in extensive damages, particularly at Reno and vicinity, to expensive hotels, industrial and commercial firms, offices, and residences. The flood problem is aggravated by bedload deposition in the channel and by large amounts of drift which collect at the street bridges.

*Recommended plan of improvement.*—A 15,000-acre-foot reservoir for flood control at the Martis Creek site about 32 miles upstream from Reno, together with channel improvements in Reno.

*Estimated cost (1959 price level).*—

Federal .....	\$2, 385, 000
Non-Federal .....	75, 000
Total .....	2, 460, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$89, 000	\$3, 500	\$92, 500
Maintenance and operation.....	14, 000	12, 000	26, 000
Total .....	103, 000	15, 500	118, 500
Annual benefits: Damages prevented.....			164, 600

*Benefit-cost ratio.*—1.4.

*Local cooperation.*—Provide a channel capacity of 14,000 cubic feet per second in Truckee River through Reno, including necessary modifications and relocations of existing structures and facilities; maintain the channel through Reno to preserve the channel capacity of 14,000 cubic feet per second; prevent encroachment in the channel; maintain the channel between Reno and the California-Nevada State line clear of all debris and drift; and adequately inform interests affected that the project does not provide protection against maximum floods. They have indicated willingness to meet the requirements of local cooperation.



*Comments of the State and Federal agencies.—*

Department of the Interior: Makes several comments including that of the Fish and Wildlife Service which is concerned about the passage of fish upstream through the ungated outlet works. The Chief of Engineers has replied to the Secretary of the Interior that appropriate consideration will be given to the views of the Department during the planning stage and after construction, if the project is authorized by Congress.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

Federal Power Commission: Favorable.

Public Health Service: Favorable.

State of Nevada: Favorable.

State of California: Makes several comments including that further consideration be given to including a gated outlet works for conservation use. The Chief of Engineers has replied indicating that full consideration will be given to the views of the State after construction, if the project is authorized by Congress.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.—*The committee considers the proposed project desirable and warranted for alleviation of extensive damages to expensive hotels and other establishments, industrial and commercial firms, offices, and residences. It is also noted that a major flood under existing conditions would endanger human life.

## ALAMEDA CREEK, CALIF.

(S. Doc. 128, 87th Cong.)

*Location.—*Alameda Creek rises in Santa Clara County and flows generally westward to enter the southern arm of San Francisco Bay.

*Authority.—*Senate Public Works Committee resolutions adopted April 15, 1949 and June 17, 1949.

*Existing project.—*There is no existing Federal project.

*Flood problem.—*The flood problem consists of overbank flooding in the coastal plain area and Livermore Valley, erosion and inundation in Niles Canyon, and inadequate drainage in Livermore Valley.

*Recommended plan of improvement.—*Channel improvements and levees for the coastal plain and Federal participation in the multiple-purpose Del Valle Dam and Reservoir to be constructed by the State of California.

*Estimated cost (price level of December 1960).—*

	Federal	Non-Federal	Total
Del Valle Reservoir (Federal participation for flood control):			
Annual charges:			
Interest and amortization .....	\$148,200	\$500	\$148,700
Maintenance and operation .....	<sup>1</sup> 28,000	0	28,000
Total .....	176,200	500	176,700
Annual benefits: Damages prevented .....			240,000
Coastal plain improvements:			
Annual charges:			
Interest and amortization .....	458,000	144,000	602,000
Maintenance and operation .....		132,000	132,000
Loss of land productivity .....		15,000	15,000
Total .....	458,000	291,000	749,000
Annual benefits: Damages prevented .....			1,680,000

<sup>1</sup> Present worth of \$776,000 to be paid in lump sum to State.

*Project economics.*—

	Del Valle Reservoir	Coastal Plain	Total
Federal.....	<sup>1</sup> \$4,070,000	\$10,610,000	\$14,680,000
Non-Federal.....	8,300,000	2,400,000	10,700,000
Total.....	12,370,000	13,010,000	25,380,000

<sup>1</sup> Consists of \$3,800,000 cash contribution to the State and \$270,000 for Federal cost of engineering, design supervision, and administration.

*Benefit-cost ratio.*—Del Valle Reservoir, 1.4; Coastal Plain 2.2.

*Local cooperation.*—(a) Coastal Plain improvements: Provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project; hold and save the United States free from damages due to the construction works; relocate all highway bridges, and approaches thereto, and utilities necessary for the construction and maintenance of the project; maintain and operate the completed works; prevent any encroachment on flood channels and ponding areas which would decrease the effectiveness of the project for flood control; and adjust all claims regarding water rights which might be affected by the project. (b) *Del Valle Reservoir* (Federal participation for flood control): Provided that prior to making any contribution an agreement be made that operation of project for flood control will provide the benefits and will be operated in accordance with rules and regulations prescribed by the Secretary of the Army, Federal monetary contributions be administered where it does not exceed 30.7 percent of construction cost and that the total Federal contributions toward the cost of the Del Valle project not exceed \$4,080,000, design and construct project subject to review and approval by Chief of Engineers, prevent encroachment, adjust all claims regarding water rights, and hold and save. Local interests have indicated willingness to furnish requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

*State of California:* The State in commenting on the report stated that it could not concur in the concept of deducting from the Federal share of the project costs, the non-Federal hypothetical and relocation savings in the Coastal Plain. After due consideration, the Chief of Engineers concluded that the benefits are widespread and should be borne by the Federal Government.

*Comments of the Bureau of the Budget:* No objection.

*Remarks.*—The committee notes that the proposed channel improvements and Federal participation in the multiple-purpose Del Valle Reservoir to be constructed by the State of California, are necessary for flood control and water supply purposes. Flood protection will be provided to an extensive network of highways, roads, streets, railroads, agricultural lands, homes, and industrial properties.

## CORTE MADERA CREEK, MARIN COUNTY, CALIF.

(H. Doc. 545, 87th Cong.)

*Location.*—Corte Madera Creek and its tributaries drain an area of about 29 square miles in Marin County, Calif. on the west side of San Francisco Bay.

*Authority.*—1944 Flood Control Act.

*Existing project.*—There is no existing Federal project. Local interests have constructed noncontinuous bank protection works and Phoenix Lake Reservoir on Ross Creek for water supply.

*Flood problem.*—Floods in the basin result from winter rains, and are of short duration. Major flood problems arise from inadequate channel capacities and unstable bank conditions.

*Recommended plan of improvement.*—Channel improvements on Corte Madera, San Anselmo, Sleepy Hollow, Tamalpais, Unnamed, and Fairfax Creeks. Improvements include channel enlargement, concrete lining, levees and debris removal, and provide for interior drainage of protected areas and for improved fish migration and spawning conditions.

*Estimated cost (1961 price level).*—

Federal .....	<sup>1</sup> \$5, 692, 000
Non-Federal .....	1, 180, 000
Total .....	6, 872, 000

<sup>1</sup> See note.

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization .....	\$216, 200	\$57, 800	\$274, 000
Maintenance and operation .....		26, 200	26, 200
Loss of land productivity .....		5, 800	5, 800
Total .....	216, 200	89, 800	306, 000
Annual benefits:			
Flood damages prevented .....			310, 000
Erosion damages prevented .....			60, 000
Saving in cost of bank protection .....			26, 000
Land enhancement .....			27, 000
Total .....			423, 000

*Benefit-cost ratio.*—1.4.

*Local cooperation.*—Provide lands, easements and rights-of-way needed, including the modification of bridges and utilities; hold and save the United States free from damage due to the works; maintain and operate the project, including prevention of encroachments; and adjust all claims for water rights. Local interests have indicated willingness to furnish requirements of local cooperation.

*Comments of the State and Federal Agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Public Health Service: Favorable.

State of California: Favorable.



*Comments of the Bureau of the Budget.*—No objection. However, the Bureau would recommend that authorization of the project be subject to a local cash contribution of at least 50 percent of that part of the project cost associated with land enhancement resulting from creation of new and usable land out of tidal marsh by placement of dredged material.

*NOTE.*—The Secretary of the Army recommends the improvement as proposed by the Chief of Engineers subject to the additional requirement that local interests contribute in cash 3% of the Federal construction cost of the Ross Valley unit, an amount presently estimated at \$158,000. With this change, the net Federal cost for construction is estimated at \$5,534,000.

*Remarks.*—The committee finds that the proposed improvement would alleviate the flood problem arising from the present inadequate channel capacities. The improvement is considered to be very desirable. The committee concurs in the recommendation of the Secretary of the Army that, in addition to other items of local cooperation, local interests be required to contribute in cash 3 percent of the Federal construction cost of the Ross Valley unit, in view of the land enhancement benefits resulting from creation of new and usable land out of tidal marsh by placement of dredged material.

NEW MELONES PROJECT, STANISLAUS RIVER, CALIF.

(H. Doc. 453, 87th Cong.)

*Location.*—The Stanislaus River rises on the western slope of the Sierra Nevada Mountains and enters the lower San Joaquin River south of Stockton, Calif.

*Authority.*—House Public Works Committee resolution adopted April 12, 1961.

*Existing project.*—The present Federal project, authorized in 1944 without power, provides for storage of 450,000 acre-feet initially and 1,100,000 acre-feet ultimately as part of the lower San Joaquin River and tributaries project. No construction work has been done.

*Flood problem.*—The area subject to flooding along the Stanislaus River extends from the foothill line to the San Joaquin River and contains about 35,000 acres, most of which is highly developed cropland. Railroads, highways, and suburban areas of Ripon, Oakdale, and Riverbank lie in the flood plain. Stanislaus River flows contribute to flooding of 50,000 acres along the San Joaquin River, 60,000 acres in the upper delta and 125,000 acres in the lower delta, which contain highly developed field and truck croplands, a number of public and commercial installations, several important military facilities, suburban developments, and vital railway, highway, and communications facilities.

*Recommended plan of improvement.*—Modification of the authorized dam and reservoir project to provide for storage of 2,400,000 acre-feet and a powerplant with an installed capacity in the order of 150,000 kilowatts.

*Estimated cost (price level of July 1960).—*All Federal, \$113,717,000.

*Project economics.—*

Annual charges (all Federal) :

Interest and amortization-----	\$4, 468, 000
Maintenance and operation-----	820, 000
Taxes foregone-----	935, 000

Total -----	6, 223, 000
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Annual benefits :

Damages prevented-----	1, 030, 000
Irrigation -----	4, 443, 000
Power-----	3, 993, 000
Recreation -----	350, 000

Total-----	9, 816, 000
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*Benefit-cost ratio.—*1.6.

*Local cooperation.*—Upon completion of construction the project would become an integral part of the Central Valley project, and be operationally and financially integrated with it; operation and maintenance of the project would be accomplished by the Secretary of the Interior; the flood control operation of the project would be in accordance with rules and regulations prescribed by the Secretary of the Army; and provided that local interests agree to maintain the existing levees on the Stanislaus River from Goodwin Dam to the San Joaquin River and prevent encroachment on the channel and floodway between the levees so as to preserve a safe carrying capacity throughout that reach of at least 8,000 cubic feet per second. The Chief of Engineers to make such adjustments in the project plan as he may find to be in the public interest after consultation with the Bureau of Reclamation and the State of California and to maintain, as necessary, suitable channel conditions to preserve the present non-damaging capacity of 8,000 cubic feet per second from Goodwin Dam to the San Joaquin River. Local interests are willing to meet requirements of local cooperation.

*Comments of the State and Federal agencies :*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Federal Power Commission: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee considers that the need for full development and maximum utilization of the water resources of the Stanislaus River Basin as well as the need for an adequate degree of flood protection on the Stanislaus and lower San Joaquin Rivers, warrants modification of the New Melones project as proposed.

## FRESNO RIVER BASIN, CALIF. (HIDDEN RESERVOIR)

(S. Doc. 37, 87th Cong.)

*Location.*—Fresno River is the most southerly of the major east-bank tributaries of San Joaquin River in Central Valley, Calif. It rises on the western slope of the Sierra Nevada and flows westerly through the mountains and foothills and thence across a fiat valley. The river drains an area about 60 miles long with average width of 10 miles.

*Authority.*—Senate Public Works Committee Resolution adopted June 26, 1958.

*Existing project.*—There is no Federal flood control project in the Fresno River Basin. Projects of the Bureau of Reclamation consist of the existing Friant Dam and the existing Madera Canal which deliver irrigation water from the reservoir to the local service areas. The State of California is constructing levees along the San Joaquin River which will extend up Fresno River to the Chowchilla Canal.

*Flood problems.*—The flood plain of Fresno River extends from the foothill line to San Joaquin River, and contains about 145,000 acres, including the city of Madera. Floods on the stream result mainly from rainfall in the season from November through April, and are characterized by high peak flows and short durations. The majority of flood damages are crop losses. In addition there is a need for irrigation water and development of recreation facilities.

*Recommended plan of improvement.*—A multiple-purpose reservoir for flood control, irrigation, recreation at the Hidden site on Fresno River, about 15 miles northeast of the city of Madera; supplemental channel improvements, together with levees and appurtenant works, on Fresno River for about 7 miles upstream from the Chowchilla Canal.

*Estimated cost (price level of July 1959).—*

Federal .....	<sup>1</sup> \$14, 338, 000
Non-Federal .....	220, 000
Total .....	14, 558, 000

<sup>1</sup> The sum of \$3,698,000 will be reimbursed to the United States for irrigation.

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$534, 000	\$11, 000	\$545, 000
Maintenance and operation.....	1 80, 000	6, 000	86, 000
Total.....	614, 000	17, 000	631, 000
Annual benefits:			
Damages prevented.....			615, 000
Irrigation.....			246, 000
Recreation.....			70, 000
Total.....			931, 000

<sup>1</sup> Includes \$17,000 apportioned to local interests for irrigation.

*Benefit-cost ratio.*—1.5.

*Local cooperation.*—(a) Hidden Dam and Reservoir: (1) Prior to construction of the dam and reservoir for irrigation, Secretary of the



Interior make necessary arrangements for repayment of that part of the construction cost and annual operation and maintenance cost allocated to irrigation, presently estimated at \$3,698,000 and \$17,000, respectively, such repayment to be financially integrated into the Central Valley project of the Bureau of Reclamation. (2) Insofar as compatible with law and overall project requirements. (a) After authorization, such reasonable modifications be made in project facilities and operation as may be found justified by the Commissioner of the U.S. Fish and Wildlife Service and agreed upon by the Chief of Engineers; and (b) The Chief of Engineers operate the dam and reservoir for irrigation in accordance with regulations prescribed by the Bureau of Reclamation. (3) Local interests sponsoring any permanent pool for fish and wildlife and/or recreation be required to settle all water rights pertaining to permanent pool for these purposes.

(b) Channel improvements: (1) Provide, without cost to the United States all lands, easements, and rights-of-way; (2) make necessary relocations and alterations to existing improvements; (3) hold and save the United States free from damages; (4) maintain and operate; and (5) preserve, or restore and thereafter maintain the Fresno River Channel from the Hidden Dam downstream to the channel work recommended herein at capacities prevailing in 1959. Local interests are willing to meet requirements of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: The Department of the Interior makes several comments including its recognition of the views of the House Subcommittee on Public Works Appropriations during the fiscal year 1960 hearings, that construction should not be initiated on six of the Corps of Engineers projects in California, including the Hidden Dam on Fresno River, until repayment contracts have been negotiated. The Chief of Engineers has replied to the Secretary of the Interior that consideration was given to this matter and that his final report so recommends, and further that appropriate consideration would be given to the other views of the Department during the planning stage of the project, if authorized.

Department of Agriculture: Favorable.

Federal Power Commission: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.—*The Bureau notes that \$1,055,000 of the investment in the proposed project has been allocated to recreation although the specific investment involved in providing the contemplated recreation facilities is estimated to be only \$140,000. The Bureau of the Budget states that the President in his Natural Resources message to the Congress instructed the Bureau of the Budget to reevaluate current standards for appraising the feasibility of water resources projects. A review of current standards is now underway. If the Fresno River Basin project is authorized by the Congress, the Budget would expect that, prior to the negotiation of irrigation repayment arrangements with the water users and a request for funds to initiate construction, the Corps of Engineers would reallocate the costs of the project to the extent necessary to conform with

the evaluation standards adopted by the administration. The Bureau of the Budget advises that there would be no objection to the submission of the report to the Congress.

*Remarks.*—The committee notes that the proposed improvements will provide a high degree of flood protection on Fresno River and will aid in preventing flood damages along the San Joaquin River. In addition, they will provide a supplementary water supply for irrigation and other purposes, as well as significant recreational benefits. The plan is economically justified and the requirements of local cooperation are appropriate.

#### CHOWCHILLA RIVER BASIN, CALIF. (BUCHANAN RESERVOIR)

(S. Doc. 98, 87th Cong.)

*Location.*—Chowchilla River is a major east-bank tributary of the San Joaquin River in central California. It enters the San Joaquin River about 18 miles west of Chowchilla.

*Authority.*—Senate Public Works Committee resolution adopted June 26, 1958.

*Existing project.*—There is no Federal flood control project in the Chowchilla River Basin.

*Flood problem.*—Floods on the stream result chiefly from rainfall in the season from November through April and are characterized by high peak flows and short durations. Crop losses account for the major part of the flood damages. Flood flows of the Chowchilla River also contribute to flooding along the San Joaquin River.

*Recommended plan of improvement.*—A multiple-purpose reservoir at the Buchanan site on Chowchilla River, about 16 miles northeast of the city of Chowchilla, and supplemental channel improvements, together with levees and appurtenant works, on Ash Slough for about 5 miles upstream from the Chowchilla Canal.

*Estimated cost (price level of July 1960).*—

Federal .....	<sup>1</sup> \$13, 585, 000
Non-Federal .....	150, 000
Total .....	13, 735, 000

<sup>1</sup> The sum of \$6,341,000 to be reimbursed by local interests for irrigation.

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization .....	\$519, 000	\$8, 000	\$527, 00
Maintenance and operations .....	192, 000	2, 000	94, 000
Total .....	611, 000	10, 000	621, 000
<b>Annual benefits:</b>			
Damages prevented .....			579, 000
Irrigation .....			388, 000
Recreation .....			75, 000
Total .....			1, 042, 000

<sup>1</sup> Includes \$43,000 apportioned to local interests for irrigation.

*Benefit-cost ratio.*—1.7.

*Local cooperation.*—(a) Buchanan Dam and Reservoir: (1) Prior to construction of the dam and reservoir, the Secretary of the Interior



make necessary arrangements for repayment, under the provisions of reclamation law, of that part of the construction cost and annual operation and maintenance cost allocated to irrigation, presently estimated at \$6,341,000 and \$43,000, respectively, the final cost allocation to be made by the Secretary of the Army, with the assistance of the Secretary of the Interior; such repayment to be financially integrated into the Central Valley project of the Bureau of Reclamation; (2) insofar as compatible with law and overall project requirements: a. After authorization, such reasonable modifications be made in project facilities and method of operation as may be found justified by the Commissioner of the U.S. Fish and Wildlife Service and agreed upon by the Chief of Engineers; and b. The Chief of Engineers operate the dam and reservoir for irrigation in accordance with regulations prescribed by the Bureau of Reclamation; (3) the local interests sponsoring any permanent pool in the reservoir for fish and wildlife or recreation be required to settle all claims for water rights pertaining to establishment and use of a permanent pool for these purposes.

(b) Channel improvements: Local interests, prior to construction, give assurances satisfactory to the Secretary of the Army that they will: (1) Furnish without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project; (2) make all necessary relocations and alterations to existing improvements, including highway facilities, which may be required for construction of the project; (3) hold and save the United States free from damages due to the construction works; (4) maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; and (5) preserve, or restore and thereafter maintain, the other channels of Chowchilla River and Ash and Berenda Sloughs from Buchanan Dam downstream to the Chowchilla Canal at the capacities existing in 1960. Local interests are willing to meet the requirements of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: The Department of the Interior has no objection to authorization of the project at this time; but believes that the question of physical integration with the Central Valley project deserves further consideration. In reply to the Secretary of the Interior, the Chief of Engineers indicated that the report provides for financial and functional integration with the Central Valley project, that negotiations concerning this matter are in process, and he concurs that authorization of the Buchanan project need not be delayed pending these negotiations.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.—*The committee believes that the proposed improvements will provide a high degree of flood protection on Chowchilla River and will aid in preventing flood damages along the San Joaquin River. In addition, they will provide a supplementary water supply for irrigation and other purposes, as well as significant recreational benefits. The plan is well justified and the requirements of local cooperation are appropriate.



## MORMON SLOUGH, CALAVERAS RIVER, CALIF.

(H. Doc. 576, 87th Cong.)

*Location.*—Calaveras River drains a Sierra Nevada and valley floor area of 590 square miles upstream from Stockton, into the San Joaquin River of the Central Valley of California. Mormon Slough is the principal distributary channel of lower Calaveras River.

*Authority.*—Resolution by the Committee on Public Works of the House of Representatives adopted July 23, 1956.

*Existing project.*—The existing Federal works consists of the New Hogan Dam and Reservoir on Calaveras River near the foothill line being constructed for flood control, conservation, and other purposes, and the Stockton and Mormon Channels project (diverting canal), which is a navigation project and consists of enlargement of the lower 5 miles of Calaveras River, construction of the diverting canal and construction of a levee along the left bank of the diverting canal. The Bureau of Reclamation has proposed construction of a canal which would cross the area downstream from Bellota. Local interests have constructed Hogan Dam, which will be replaced by New Hogan Dam, and various levees and irrigation structures along the streams, including irrigation control of flow structures at Bellota.

*Flood problem.*—Although New Hogan Dam will control flood runoff from much of the basin, runoff originating below the dam can exceed the downstream capacities and cause large damages to agricultural and suburban areas and in the city of Stockton.

*Recommended plan of improvement.*—The plan consists of improvement of 38.5 miles of channels downstream from Bellota. The channel improvement consists of 12.5 miles of enlargement (by excavation and levee construction), of the diverting canal and part of Mormon Slough and 26 miles of intermittent channel enlargement and channel, clearing along Calaveras River and Mormon Slough. Provision is also made for 6,000 lineal feet of bank protection, and for modification and alteration of railroad and highway bridges.

*Estimated cost (1961 price level).*—

Federal .....	\$1, 960, 000
Non-Federal .....	1, 500, 000
Total .....	3, 460, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$72, 000	\$78, 000	\$150, 000
Maintenance and operation.....	0	30, 000	30, 000
Total.....	72, 000	108, 000	180, 000
Annual benefits: Damages prevented.....			265, 000

*Benefit-cost ratio.*—1.5.

*Local cooperation.*—(a) Furnish all lands, easements, and rights-of-way, including spoil disposal areas, necessary for construction of the works; (b) accomplish all relocations and alterations of roads,

streets, buildings, pipelines, utilities bridges, and other structures (except railroad facilities) made necessary by the construction work; (c) hold and save the United States free from damages due to the construction works; (d) maintain and operate all the works after completion, including the lower Calaveras River, in accordance with regulations prescribed by the Secretary of the Army; and (e) Prescribe and enforce regulations designed to prevent encroachment of any type that would impair the flood control effectiveness of the work.

*Comments of State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.*—No objections.

*Remarks.*—The proposed project would provide for channel enlargement, by excavation and levee construction, and for channel clearing and other work to control runoff originating below New Hogan Dam. This uncontrolled runoff now causes large damages to agricultural and suburban areas and in the city of Stockton. Measures to alleviate these damages are warranted.

#### RUSSIAN RIVER, CALIF., DRY CREEK BASIN

(H. Doc. 547, 87th Cong.)

*Location.*—The Russian River Basin is located in Mendocino and Sonoma Counties in the central part of California near the Pacific coast. Russian River rises in the coastal range about 130 miles north of San Francisco and flows southerly and westerly to the Pacific Ocean.

*Authority.*—This report is in partial response to House Public Works Committee resolution adopted July 1, 1958 with reference to problems on Dry Creek, Big Sulphur Creek, Mark West Creek, and other creeks in Russian River reports.

*Existing projects.*—The existing Federal project provides for Coyote Valley Dam forming Lake Mendocino and channel stabilization works along the Russian River.

*Flood problem.*—Severe winter storms in the Russian River Basin cause frequent flooding of agricultural and urban areas. In addition to the flood problem, there is an increasing need for adequate supplies of water for agricultural, municipal, and industrial uses.

*Recommended plan of improvements.*—The plan of improvement for Dry Creek provides for construction of a dam at the Warm Springs site, and channel improvements downstream, for flood control, water supply and recreation.

*Estimated cost (price level of December 1960).*—

Federal	-----	\$42, 400, 000
Non-Federal	-----	20, 000
Total	-----	42, 420, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$1, 169, 000	\$591, 000	\$1, 760, 000
Maintenance and operation.....	207, 000	62, 000	269, 000
Total.....	1, 376, 000	653, 000	2, 029, 000
Annual benefits:			
Flood damages prevented.....			655, 000
Increased land use.....			204, 000
Water conservation.....			850, 000
Recreation.....			855, 000
Total.....			2, 564, 000

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Local interests will be required to hold and save the United States free from damage; maintain and operate the channel improvement; prevent encroachment on the channel improvement; adjust all claims for water rights; provide all lands, easements and rights-of-way; make all utility and highway bridge modifications for the channel work and reimburse the United States for costs allocated to water supply, in accordance with the Water Supply Act of 1958, presently estimated at \$11,730,000 for construction and \$50,000 for maintenance. Sonoma County Flood Control and Water Conservation District would assume requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.*—No objection. However, the Bureau would expect that prior to any request for funds to initiate construction of the project, it would be reevaluated in the light of the administration's standards and policies, pertaining to recreation, applicable at that time.

*Remarks.*—The committee notes that the proposed channel improvements and the multiple-purpose reservoir are necessary and justified for flood control, recreation, and water conservation purposes. Flood protection will be provided to extensive agricultural and urban areas. Additional water supplies will be needed for agricultural, municipal, and industrial uses, both locally and statewide.

## REDWOOD CREEK, HUMBOLDT COUNTY, CALIF.

(H. Doc. 497, 87th Cong.)

*Location.*—Redwood Creek is on the western slopes of the Coast Range Mountains in northwestern California. The stream drains about 283 square miles and enters the Pacific Ocean about 50 miles south of the Oregon boundary.

*Authority.*—1954 Flood Control Act.



*Existing project.*—There are no Federal or effective local flood-protection projects, or related water-control projects, on Redwood Creek.

*Flood problem.*—The runoff from winter rainstorms causes frequent flooding along the lower 4 miles of the stream, including the community of Orick which was severely damaged in January 1953.

*Recommended plan of improvements.*—The improvements consist of an improved channel, levees, and revetment along the lower 4 miles of the stream.

*Estimated cost (July 1960 price level).*—

Federal .....	\$2, 580, 000
Non-Federal .....	270, 000
Total .....	2, 850, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization .....	\$95,000	\$13,000	\$108,000
Maintenance and operation .....		19,500	19,500
Loss of land productivity .....		1,500	1,500
Total .....	95,000	34,000	129,000
Annual benefits:			
Damages prevented .....			222,000
Land enhancement .....			6,000
Total .....			228,000

*Benefit-cost ratio.*—1.8.

*Local cooperation.*—Provide all lands, easements, and rights-of-way needed for the project, including relocation and alteration of utilities; hold and save the United States free from damages due to the works; maintain and operate the completed works; and prevent encroachment on the flood channels and ponding area, or provide substitute storage capacity or equivalent pumping capacity. Local interests have indicated willingness to meet requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget:* No objection.

*Remarks.*—The committee notes that the proposed channel improvements, levees, and revetment are necessary, and will provide a high degree of flood protection to urban and rural developments. The improvements are justified, and the requirements of local cooperation are appropriate.

## ROGUE RIVER BASIN, OREGON AND CALIFORNIA

(H. Doc. 566, 87th Cong.)

*Location.*—Rogue River Basin is located in southwestern Oregon and northern California with Oregon containing about 97 percent of the basin area.

*Authority.*—Public Law 183 approved July 1, 1935, and Flood Control Acts of 1936 and 1958.

*Existing project.*—The Corps has provided 7 minor local protection works under emergency and continuing authorities at total cost of \$316,000. Navigation project now under construction at mouth of river will provide 13-foot project and cost \$3.5 million. Bureau of Reclamation has constructed 16,000 kilowatt powerplant on tributary. Local interests have irrigation facilities for about 72,000 acres. Of 9 organized districts serving 42,000 acres, 3 have storage facilities. There is a small reservoir for water supply and 8 private hydroelectric plants with a total capacity of about 56,000 kilowatts.

*Flood problem.*—Flood damages occur in the Rogue River Basin in a number of discontinuous areas along the main stream and its principal tributaries. The most recent major flood occurred in 1955 and inundated more than 13,000 acres of land.

*Recommended plan of improvement.*—Three multiple-purpose reservoirs. A rock and gravel embankment dam at Lost Creek site, 360 feet high with usable storage capacity of 315,000 acre-feet. A rock and gravel embankment dam at Elk Creek site, 235 feet high with usable storage capacity of 95,000 acre-feet. An earth and gravel embankment dam at the Applegate River site, 230 feet high with usable storage capacity of 65,000 acre-feet.

*Estimated cost.*—(all Federal, July 1961 price level).—

Lost Creek Dam.....	\$74, 500, 000
Elk Creek Dam.....	17, 500, 000
Applegate Dam.....	14, 700, 000
Total .....	<sup>1</sup> 106, 700, 000

<sup>1</sup> Of this amount, \$5,977,000 and \$16,592,000 will be repaid by local interests for water supply and irrigation, respectively.

*Project economics.*—

**Annual charges:**

Interest & amortization.....	\$3, 191, 000
Operation, maintenance, and replacement.....	802, 400
Taxes foregone and economic costs.....	78, 800
Total .....	4, 072, 200

**Annual benefits:**

Flood control.....	1, 360, 000
Irrigation .....	925, 000
Water Supply.....	322, 700
Fish and wildlife.....	1, 130, 200
Power .....	1, 881, 700
Recreation .....	528, 000
Total.....	6, 147, 600

*Benefit-cost ratio.*—1.5.

*Local cooperation.*—Prior to construction, they will agree to reimburse the United States for first costs and annual operation, maintenance, and replacement costs allocated to municipal and industrial



water supply storage, presently estimated at \$5,977,000 and \$24,900, respectively; the Secretary of the Interior make necessary arrangements for repayment of that part of the construction cost and annual operation, maintenance, and replacement costs allocated to irrigation, presently estimated at \$13,007,000 and \$66,500, respectively, for the Lost Creek-Elk Creek Reservoirs and \$3,585,000 and \$9,900, respectively, for the Applegate Reservoir; and the State of Oregon take necessary action to insure maintenance, in the streams, of flows to be released for benefit of the fishery. Local interests have indicated willingness to cooperate.

*Comments of the States and Federal agencies.—*

Department of the Interior: In commenting on the report the Secretary of the Interior indicated that the recommendations and authorizing legislation should include language indicating that no construction be undertaken until the Department of Interior has on hand signed contracts for repayment of the cost of irrigation. In reply, the Chief of Engineers indicated that the report has been revised to provide that prior to construction local interests give assurances satisfactory to the Secretary of the Army that they will make necessary arrangements with the Secretary of the Interior for repayment of irrigation costs under the provisions of reclamation law. In order that urgently needed flood control and other services may be provided under this arrangement without either undue delay should these projects be authorized, the Chief of Engineers will consult with and obtain the concurrence of the Department of Interior on a satisfactory basis for proceeding with project construction considering, among other factors, the acceptance of assurances of local cooperation.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

Federal Power Commission: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of Oregon: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.—*The Bureau of the Budget comments that while there would be no objection to the submission of the proposed report to the Congress, the Bureau would recommend that if the project is authorized by Congress the terms of authorization permit later determination of the appropriate agency to assume operating responsibility for the recommended projects. After careful consideration of the matter of operational responsibility, the Secretary of the Army concurs in the recommendations of the Chief of Engineers and recommends authorization of the proposed reservoirs for construction, operation and maintenance by the Corps of Engineers.

*Remarks.—*The committee recognizes the need for comprehensive development of the water resources of the Rogue River Basin for flood control, irrigation, water supply, fish and wildlife enhancement, recreation, and power. The committee concurs in the construction, operation, and maintenance of the proposed improvements by the Corps of Engineers to serve these purposes. The committee considers it desirable that the authorizing legislation clearly indicate that the project is to be located, constructed, and operated to accomplish the



benefits as set forth and described in the report and appendixes, and that in the years of short water supply all users will share the available water in the same proportions that they would share the total full supply when it is available, and that no further water-use allocations will be made from the authorized storage so as to retain the maximum possible benefits to authorized uses during the periods of adversity when storage shortages occur.

COLUMBIA RIVER AND TRIBUTARIES WASHINGTON, OREGON, IDAHO, MONTANA, WYOMING, NEVADA, AND UTAH

(H. Doc. 403, 87th Cong.)

*Location.*—The Columbia River Basin is located in the Northwest portion of continental United States and includes most of the States of Washington, Oregon, and Idaho, western Montana and small areas in Wyoming, Nevada, and Utah. The basin also includes the southeastern drainage of the Province of British Columbia, Canada.

*Authority.*—Resolution, Senate Committee on Public Works, adopted July 28, 1955 and other resolutions.

*Existing project.*—A total of 10½ million acre-feet of storage, sufficient to control major floods to 1,030,000 cubic feet per second is presently available at Federal and non-Federal projects existing or under construction. A navigable channel 9 feet deep and 250 feet wide is authorized on the main stem to the head of McNary pool (mile 352) and on Snake River to mile 10.0. Existing, under construction, and authorized Federal projects have an aggregate installed hydro-electric capacity of 9,400,000 kilowatts.

*Flood problem.*—The area of major flood damage lies along the 140-mile reach of Columbia River below Bonneville Dam. About 60 percent of the flood plain is protected to some degree by levees or other protective works but almost none of these improvements provide adequate protection against larger floods. Without levees or storage, the average annual flood damages along the lower Columbia River would be \$38,300,000. Existing levees reduce this by \$13,600,000 annually and authorized levee improvements when completed would further reduce this damage by \$700,000 leaving a residual damage of \$24 million which is subject to only limited reduction by existing storage.

*Recommended plan of improvement.*—The plan of improvement provides for the construction of 12 projects, including dams, reservoirs, and related works, capable of effecting, in combination with existing and reasonable assured storage in the United States and Canadian portions of the basin, control of the 1894 flood to 600,000 cubic feet per second. These recommended projects would provide substantial hydroelectric power, navigation, recreation, fish and wildlife, as well as other benefits. The reporting officers also recommend that the depth and width of the authorized channel in the Columbia-Snake barge navigation project be established as 14 and 250 feet, respectively, at minimum regulated flow.

*Estimated costs (1957 price levels).—*

Project	Location	Construction cost <sup>1</sup>	Annual operation and maintenance
Flathead Lake Outlet Improvement <sup>2</sup>	Flathead River, Mont.-----	\$6, 142, 000	\$13, 000
Knowles <sup>2</sup>	do-----	234, 910, 000	725, 000
High Mountain Sheep <sup>2</sup>	Snake River, Idaho and Oreg.-----	<sup>3</sup> 198, 083, 000	<sup>3</sup> 2, 230, 000
China Gardens-----	do-----	62, 220, 000	704, 000
Asotin-----	do-----	<sup>4</sup> 83, 340, 000	832, 000
Penny Cliffs <sup>2</sup>	Middle Fork, Clearwater River, Idaho-----	210, 036, 000	758, 000
Bruces Eddy-----	North Fork, Clearwater River, Idaho-----	<sup>5</sup> 127, 166, 000	650, 000
Garden Valley Division <sup>2</sup> <sup>6</sup>	Payette River, Idaho-----	146, 100, 000	1, 150, 000
Strube reregulating reservoir-----	South Fork, McKenzie River, Oreg.-----	6, 685, 000	32, 400
Gate Creek-----	Gate Creek, Oreg.-----	15, 920, 000	91, 200
Fern Ridge (modification of existing project).-----	Long Tom River, Oreg.-----	140, 000	0
Cascadia-----	South Santiam River, Oreg.-----	28, 270, 000	109, 000
Total-----	-----	1, 119, 012, 000	7, 294, 600

<sup>1</sup> Exclusive of costs of preauthorization studies.<sup>2</sup> See comments of the Bureau of the Budget.<sup>3</sup> Estimates based on pool elevation of 1,510 feet above mean sea level, and the construction of an arch dam rather than a concrete gravity dam, which was estimated to cost \$241,782,000 in the report of the Board of Engineers for Rivers and Harbors.<sup>4</sup> For power only, but with provisions for future navigation lock.<sup>5</sup> Planning studies, incomplete at this time, indicate a concrete gravity dam of somewhat higher elevation than assumed in the division engineer's report, will be found economically justified.<sup>6</sup> As planned and proposed by Bureau of Reclamation with 50-year period of analysis.*Project economics (with Canadian storage and 50-year life).—*

Project	Annual benefits (thousands)				Annual charges (thousands)				Benefit-cost ratio
	Flood control	Power	Other	Total	Interest and amortization	Operation, maintenance and repair	Other <sup>1</sup>	Total	
Flathead Lake outlet improvements-----	\$147.0	\$114	-----	\$261.0	\$223	\$13	-----	\$236	1. 11
Knowles-----	447.0	11, 211	\$58	11, 716.0	9, 116	725	\$980	10, 821	1. 08
High Mountain Sheep-----	239.0	27, 454	16	27, 709.0	7, 510	2, 230	2, 400	12, 140	2. 28
China Garden-----	-----	5, 802	13	5, 815	2, 317	704	507	3, 528	1. 65
Asotin (without lock)-----	-----	9, 599	32	9, 631.0	3, 085	832	839	4, 756	2. 03
Penny Cliffs-----	911.0	9, 976	282	11, 169.0	7, 872	758	872	9, 502	1. 18
Bruces Eddy-----	552.0	7, 646	553	8, 751.0	4, 769	650	668	6, 087	1. 44
Garden Valley division-----	143.0	9, 236	—34	9, 345.0	5, 409	1, 150	-----	6, 559	1. 43
Strube reregulating reservoir <sup>2</sup> -----	-----	674	-----	674.0	441	41	101	583	1. 11
Gate Creek-----	715.0	11	<sup>3</sup> 161	887.0	586	91	1	678	1. 31
Fern Ridge-----	13.8	-----	-----	13.8	<sup>5</sup> -----	-----	-----	5	2. 76
Cascadia-----	1, 084.0	4	<sup>4</sup> 445	1, 533.0	1, 051	109	12	1, 172	1. 31

<sup>1</sup> Includes taxes, production and harvesting costs on national forest land, and others.<sup>2</sup> Benefits and charges are incremental amounts associated with Strube and peaking installation at Cougar compared to initial high load factor installation at Cougar. For Strube only, the annual costs are: Interest and amortization, \$242,000; operation, maintenance and repair, \$32,000; and other, \$26,000.<sup>3</sup> Includes \$122,500 irrigation benefits and \$26,900 pollution abatement benefits.<sup>4</sup> Includes \$313,400 irrigation benefits and \$69,800 pollution abatement benefits.*Local cooperation.*—No local cooperation is required.

*Comments of States and agencies.*—Comments of States and agencies were asked for in January 1960 on the Division report of June 1958, the River and Harbor Board report of June 5, 1959 and the draft of the Chief of Engineers report of January 1960, all of which reflected conditions prior to the Canadian treaty. Following U.S. ratification



of the Canadian treaty on March 16, 1961, the report of the Chief of Engineers was redrafted to reflect features of the treaty and resubmitted, by letter dated March 31, 1961, to States and agencies for comment. The comments of States and agencies "before treaty" and "after treaty" are summarized below.

Department of the Interior: (a) Before treaty: No comment; (b) after treaty: Generally favorable. Expressed the view that only 8 of the 12 projects recommended by the Chief of Engineers, with an estimated total Federal cost of \$558.6 million, should be authorized at this time, and that one of these projects (Knowles) should be constructed by the Bureau of Reclamation. Also expressed view that authorization of four projects (Flathead Lake outlet improvement, Penny Cliffs, High Mountain Sheep, and Garden Valley) should be deferred pending the results of detailed fish and wildlife studies by Interior and further engineering and economic studies by Interior and Army and that, at appropriate times, Flathead Lake outlet improvements and Penny Cliffs be recommended for construction by the corps and High Mountain Sheep and Garden Valley Division be recommended for construction by the Bureau of Reclamation.

Department of Agriculture: (a) Before treaty: Generally favorable and noted that the effects of the proposed projects on forest management had been carefully appraised and assessed in realistic terms; (b) after treaty: Generally favorable. Expressed the view that Nez Perce and/or Lower Canyon should not be constructed until acceptable fish passage facilities could be incorporated into the structures.

Department of Commerce: (a) Before treaty: Noted that report lacked detailed assessment of effects of development on highway transportation costs and estimates of present and future regulated stream flows. Pointed out the adverse effects of the Lower Canyon project on transportation facilities in Salmon River Basin; (b) after treaty: Cited previous comments and noted their continued applicability.

Department of Health, Education, and Welfare: (a) Before treaty: Noted the effects of proposed developments on oxygen levels of stream flow, pollution control efforts and minimum flow requirements to preserve or improve present water qualities; (b) after treaty: Expressed the view that the revised report contained no changes that would alter the Department's previous comments.

Federal Power Commission: (a) Before treaty: Concurred generally with the plan of development. Cited license applications before FPC for development of Middle Snake River and, therefore, refrained from comments on projects in that part of the basin. Expressed the view that development in the basin should proceed generally in accord with the plan with construction by Federal or non-Federal interests as appropriate; (b) after treaty: Generally reiterated previous comments.

Atomic Energy Commission: (a) Before treaty: Called attention to Commission's views on Ben Franklin project and proposed navigable channel up the Columbia beyond Pasco as expressed during the study stage and included in appendix B of the report.



Those views remain unchanged; (b) after treaty: Expressed the view that enactment of the plan would have no measurable impact of operational significance on fissionable materials production operations. Noted AEC request for congressional authority to provide addition of power generation facilities to the Hanford NPR reactor.

International Joint Commission: (a) Before treaty: Noted the relation of the proposed plan to plans proposed by the International Columbia River Engineering Board for the Canadian portion of the basin. Concurred generally in the conclusions and recommendations of the report; (b) after treaty: Found the revised report to be consistent with the views of the U.S. section of the Commission insofar as it is related to cooperative development of storage between United States and Canada.

State of Washington: (a) Before treaty: Expressed the view that overall scope of report fell short of meeting the needs for full development of the resources of the basin. Requested favorable recommendation for extension of navigation to the foot of Rock Island Dam and for navigation facilities (lock) in Asotin Dam; (b) After treaty: Favorable.

State of Oregon: (a) Before treaty: Concurred generally but requested extension of navigation to the foot of Rock Island Dam and the provision of navigation facilities in Asotin Dam; (b) After treaty: Concurred generally and expressed view that research in fisheries problems would take at least 12 to 15 years with ample funding.

State of Idaho: (a) Before treaty: Generally supported corps' recommendations but did not approve of the Penny Cliffs project and would like to see the Garden Valley project deferred. Urged favorable recommendation for extension of navigation to Rock Island Dam and to Lime Point, Idaho, with necessary facilities at Asotin Dam. Also urged study of and provision for fish passing facilities; (b) After treaty: Generally favorable and urged consideration of Salmon River diversion above High Mountain Sheep project.

State of Montana: (a) Before treaty: Expressed dissatisfaction with the handling of irrigation water needs, particularly, the needs after year 2010. Requested that State policies with regard to reservation of water for intrastate consumption, reservation of power generated in Montana, reservation of portion of downstream power creditable to Montana storage and compensation from power revenues for lost taxes be incorporated in authorizing legislation. Objected to the Flathead Lake outlet, Long Meadows, Paradise, Knowles and Nine Mile Prairie projects because of their effects on fish and wildlife; (b) After treaty: Noted the effects of the treaty on the plan.

State of Wyoming: (a) Before treaty: Offered no objections to the report; (b) After treaty: No objections to the report. Agreed with the recommendation for further study of effects of some projects on migratory fish.

State of Nevada: (a) Before treaty: No objection to transmittal of report to Congress; (b) After treaty: No objections.

State of Utah: (a) Before treaty: Expressed view that comments should come from States and areas most directly affected; (b) After treaty: No comment.

*Comments of the Bureau of the Budget.*—Referred to comments by the Department of Interior. Noted that those views were consistent with pertinent provisions of the Army-Interior agreement of March 14, 1962. Concurred generally with Interior's comments. Offered no objections to submission of the report to Congress provided the letter of transmittal proposed such departures from the recommendations in the report as found necessary to implement the pertinent provisions of the Army-Interior agreement.

*Remarks.*—The committee recognizes the importance of continued and timely development of the water resources of the Columbia and proposes authorization of the following projects for further Federal developments consistent with provisions of the Interior-Army agreement of March 16, 1962: Knowles Dam (for construction by Bureau of Reclamation), China Gardens Dam, Asotin Dam, Bruces Eddy Dam, Strube reregulating dam, Gate Creek dam, Fern Ridge Dam modification, and Cascadia Dam.

The committee has recommended the several projects on the Columbia River Basin as recommended by the Chief of Engineers in House Document 403. The committee is of the opinion that it would be appropriate that the Knowles Dam and Reservoir, Flathead River, Mont., be constructed, operated, and maintained by the Bureau of Reclamation, Department of the Interior.

#### BURNS CREEK DAM AND RESERVOIR, SNAKE RIVER, IDAHO

(S. Doc. 130, 87th Cong.)

*Location.*—The Snake River is the largest tributary of the Columbia River. The portion of the Snake River of interest in this report is the 5,750 square mile drainage area above Heise, Idaho, in southeastern Idaho and western Wyoming.

*Authority.*—Senate Public Works Committee resolution adopted March 19, 1954.

*Existing project.*—The principal water-resource developments in this section of the basin are Jackson Lake in Wyoming, with 850,000 acre-feet of storage for irrigation, and Palisades Reservoir in Idaho, with 1,401,600 acre-feet for irrigation, power, and recreation. The partial flood protection provided by these storage reservoirs is augmented in the reach between Heise and Roberts by levees and channel improvements to provide a safe channel carrying capacity of about 20,000 cubic feet per second.

*Flood problem.*—Floods frequently experienced along the Snake River from Heise to American Falls affect about 300 acres of residential and commercial developments in Roberts and Idaho Falls and 90,000 acres of land devoted to irrigated row crops and hay. With control from existing storage reservoirs and levee protection, the remaining average annual damages under 1962 conditions are about \$300,000.



*Recommended plan of improvement.*—Improvement of Snake River, Idaho, by the Bureau of Reclamation, as a part of the Palisades project and in accordance with the provisions of Federal reclamation laws, by design, construction, and operation of a dam and reservoir for irrigation, power, flood control, recreation, and the preservation and propagation of fish and wildlife resources, at the Burns Creek site with a storage capacity of about 234,000 acre-feet, and a powerplant of about 90,000 kilowatts.

*Estimated cost (price level of January 1962).*—All Federal, \$52 million.

*Project economics.*—

Annual charges (Federal):

Interest and amortization-----	\$1, 553, 000
Maintenance and operation-----	233, 000
Total -----	1, 786, 000

Annual benefits:

Damages prevented-----	120, 000
Irrigation -----	43, 000
Power -----	2, 556, 000
Recreation -----	231, 000
Total -----	2, 950, 000

*Benefit-cost ratio.*—1.7.

*Local cooperation.*—None required.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Idaho: Favorable.

State of Wyoming: Opposes the project.

State of Utah: Opposes the project.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget notes the adverse comments of the Governors of Utah and Wyoming and suggests that they be brought to the attention of Congress and that the Congress be reminded that the President recommended authorization of the project in his conservation message February 1962. The Bureau also advises there would be no objection to submission of the report to Congress and recommends authorization of the project.

*Remarks.*—The committee recognizes that dependable flood protection, economic power supply, and ample stored water are primary requisites for development of the Upper Snake River Basin. Increased recreational facilities also are needed to serve existing and anticipated residents and vacationists. Reregulation to be provided by the Burns Creek project will permit more efficient operation of the Palisades project. Construction of this project is considered to be highly desirable. The project would be designed, constructed, and operated by the Bureau of Reclamation.



## RIRIE DAM AND RESERVOIR, WILLOW CREEK, IDAHO

(H. Doc. 562, 87th Cong.)

*Locations.*—Willow Creek drains a 700-square mile area tributary to Snake River in southeastern Idaho. Willow Creek enters Snake River at Idaho Falls. Snake River is the largest tributary of the Columbia River.

*Authority.*—Senate Public Works Committee resolution adopted March 4, 1952 and March 19, 1954, and House Public Works Committee resolution adopted June 2, 1953.

*Existing project.*—There are no Federal flood control projects in the Willow Creek Basin. Local people have constructed various irrigation canals and diversions.

*Flood problem.*—As the stream enters the relatively flat Snake River plain, about 10 miles above Idaho Falls, the stream divides into numerous channels which have capacity to carry only minor flows. Flooding occurs principally from melting of the winter snowpack, however, rain floods can occur as evidenced by the February 1962 flood.

*Recommended plan of improvement.*—Construction by the Corps of Engineers of a dam and reservoir, with a storage capacity of about 135,000 acre-feet, on Willow Creek about 15 miles east of Idaho Falls, for flood control, irrigation, municipal water supply and recreation, and channel improvements along lower Willow Creek. Operation and maintenance by the Bureau of Reclamation.

*Estimated cost (price level of March 1962).*—All Federal, \$7,027,000.<sup>1</sup>

*Project economics.*—

Annual charges (all Federal) :

Interest and amortization-----	\$206,000
Maintenance and operation-----	41,000
Total-----	<u>247,000</u>

Annual benefits :

Flood control-----	200,000
Irrigation-----	125,000
Water supply-----	90,000
Recreation-----	80,000
Total-----	<u>495,000</u>

*Benefit-cost ratio.*—2.0.

*Local cooperation.*—Prior to construction, agree to reimburse the United States for costs allocated to water supply in accordance with the Water Supply Act of 1958, as amended, such costs presently estimated at \$700,000 for construction and \$4,000 annually for operation, maintenance, and replacement; obtain the water rights needed for storage and use of the water and hold and save the United States free from damages for water-rights claims resulting from construction and operation of the project; and make necessary arrangements with the Secretary of the Interior for repayment, under the provisions of reclamation law, of the construction cost and annual operation, maintenance, and replacement costs allocated to irrigation, presently estimated at \$960,000 and \$5,000, respectively.

<sup>1</sup> Includes \$960,000 allocated to irrigation, and \$700,000 allocated to water supply to be repaid by local water users.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Idaho: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

*Remarks.*—The committee finds that additional flood protection is required to protect a highly developed urban and agricultural area at the mouth of a flood-producing stream where natural capacities have deteriorated to a fraction of the potential discharge. Increased recreational facilities also are needed to serve existing and anticipated needs. Construction of the project is considered to be desirable and well justified. The project would be constructed by the Corps of Engineers, and maintained and operated by the Bureau of Reclamation.

## BLACKFOOT DAM AND RESERVOIR, BLACKFOOT RIVER, IDAHO

(H. Doc. 568, 87th Cong.)

*Location.*—Blackfoot River drains a 1,300-square-mile area tributary to Snake River in southeastern Idaho near Idaho Falls. Blackfoot River enters the Snake River just above American Falls Reservoir. Snake River is the largest tributary of the Columbia River.

*Authority.*—Senate Public Works Committee resolutions adopted March 4, 1952, and March 19, 1954, and House Public Works Committee resolution adopted June 2, 1953.

*Existing project.*—Improvement by the Corps of Engineers of the lower 18 miles of Blackfoot River for flood control is scheduled during 1962. The Bureau of Indian Affairs has constructed Blackfoot Dam and Reservoir (413,000 acre-feet usable capacity) on Blackfoot River and the Grays Lake Reservoir on Willow Creek which diverts water into the Blackfoot River Basin.

*Flood problem.*—Floods result primarily from snowmelt, but sometimes are augmented by storm runoff. Channel capacities are inadequate to contain the flood flows.

*Recommended plan of improvement.*—Modification of the existing Blackfoot Dam and Reservoir to provide for flood control by raising the maximum pool 2 feet, increasing the spillway capacity, improving the outlet works, and appurtenant work. Operation and maintenance by the Bureau of Indian Affairs.

*Estimated cost (price level of January 1962).*—All Federal, \$829,000.

*Project economics.—*

## Annual charges (all Federal) :

Interest and amortization-----	\$31, 000
Maintenance and operation-----	5, 000

Total-----	36, 000
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Annual benefits: Damages prevented-----	\$41, 000
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*Benefit-cost ratio.*—1.1.*Local cooperation.*—None required.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Idaho: Favorable.

*Comments of the Bureau of the Budget:* No objection.

*Remarks.*—The proposed modification of Blackfoot Dam and revised plan of operation will substantially reduce remaining flood damages in the lower Blackfoot River basin. Anticipated benefits justify the necessary work. The project would be constructed by the Corps of Engineers, and maintained and operated by the Bureau of Indian Affairs.

## WYNOOCHEE RIVER, WASH.

(H. Doc. —, 87th Cong.)

*Location.*—The Wynoochee River rises on the southern slope of the Olympic Mountains in west-central Washington and flows generally southward about 67 miles to its confluence with the Chehalis River near Montesano, Wash.

*Authority.*—House Public Works Committee resolution adopted July 29, 1954.

*Existing project.*—There is no Federal project for flood control or water conservation in the Wynoochee Basin.

*Flood problem.*—Several floods, particularly the 1955 flood, inundated agricultural lands in the lower valley. Augmented waterflows are needed for pulp and paper mills in the Grays Harbor area and for protection of fisheries. Bank erosion is causing land loss. Generation of hydroelectric power for load peaking requirements would be desirable.

*Recommended plan of improvement.*—The plan of improvement provides for construction of a dam and reservoir on the upper Wynoochee River for flood control, power, water supply, irrigation, and fishery enhancement, with a powerplant of 66,000 kilowatts generating capacity and a reregulating dam downstream.

*Estimated cost: (price level 1960).—*

Federal .....	\$40, 211, 000
Non-Federal .....	-----
Total .....	40, 211, 000

*Project economics.—*

## Annual charges.

Interest and amortization .....	1, 190, 000
Maintenance, operation and major replacements .....	<sup>1</sup> 218, 000
Taxes foregone .....	158, 000
Increased timber harvesting cost .....	6, 000

Total .....	1, 572, 000
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<sup>1</sup> Includes discounted expense of maintaining future power units.



## Annual benefits:

Damages prevented and increased land use-----	17, 000
Hydroelectric power-----	1, 336, 000
Water supply-----	356, 000
Irrigation -----	85, 000
Fisheries -----	20, 000
Recreation -----	22, 000
Total-----	1, 836, 000

*Benefit-cost ratio.*—1.2.

*Local cooperation.*—(a) Hold and save the United States free from damages for water-rights claims; (b) pay the entire costs allocated to water supply, presently estimated at \$4,653,000 for construction and \$39,000 annually for operation, maintenance, and replacements; and (c) make arrangements for repayment for costs allocated to irrigation, presently estimated at \$872,000 for construction and \$7,000 annually for operation, maintenance, and replacements. Local interests have indicated an interest in cooperating in the improvements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Federal Power Commission: Favorable.

Public Health Service: Favorable.

State of Washington: Favorable.

*Comments of the Bureau of the Budget.*—No objection to submission of the report. However, the Bureau would recommend that, if the project is authorized by the Congress, the terms of authorization provide that construction of the project for purposes including power not be undertaken until there is specific assurance that all costs allocated to power can be returned with interest within 50 years.

*Remarks.*—The committee considers that the needs for flood protection of agricultural land in the lower valley, for water supply, and for hydroelectric power for peaking purposes are sufficient to warrant authorization for construction of this project.

The committee approves this project as recommended by the Corps of Engineers. However, it feels that the installation of power generating facilities should be deferred until a restudy and approval by the Congress has been made. The restudy would be made for the purpose of determining justification of power as an added feature to the project.

## BRADLEY LAKE, COOK INLET, ALASKA

(H. Doc. 455, 87th Cong.)

*Location.*—Bradley Lake is located on Kenai Peninsula about 100 miles south of Anchorage.

*Authority.*—Flood Control Acts of 1948 and 1950.

*Existing project.*—There is no existing Federal project at Bradley Lake; however, the existing power generating capacity in the Cook Inlet area, excluding military plant, totals about 57,000 kilowatts of which 30,000 kilowatts are provided by the Eklutna hydroelectric development of the Bureau of Reclamation and about 14,500 kilowatts

by the Anchorage thermal-electric plant of the Chugach Electric Association, Inc., a Rural Electrification Administration cooperative. Small load centers on the Kenai Peninsula are supplied by internal combustion generation.

*Power problem.*—Based upon a Federal Power Commission estimate, a shortage of about 20,000 kilowatts of power will exist in the area by 1965, and 50,000 by 1970. The cost of alternative thermal-electric power is high.

*Recommended plan of improvement.*—A dam at the outlet of Bradley Lake, to raise its elevation about 100 feet, and a powerplant, with 64,000 kilowatts of installed capacity, on Kachemak Bay. Construction by the Department of the Army. Operation and maintenance by the Department of the Interior.

*Estimated cost (June 1960 price level).*—

Federal .....	\$45, 750, 000
Non-Federal .....	None

*Project economics.*—

Annual charges (all Federal) :

Interest and amortization .....	1, 699, 000
Maintenance and operation .....	258, 000

Total .....	1, 957, 000
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Annual benefits: Power .....	3, 232, 000
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*Benefit-cost ratio.*—1.7.

*Local cooperation.*—None required.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Federal Power Commission: Favorable.

State of Alaska: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The committee believes that the proposed Bradley Lake project is economically justified and needed to alleviate the impending power shortage in the Anchorage area. The committee believes that operation and maintenance should be through the Secretary of the Interior.

## SECTION 204

### SNETTISHAM PROJECT, ALASKA

(H. Doc. 40, 87th Cong.)

The Senate Committee on Interior and Insular Affairs reported a bill, S. 594, on July 25, 1962, which would authorize the construction, operation, and maintenance of the Crater-Long Lakes division of the Snettisham project, Alaska. The bill was then referred to the Committee on Public Works. The committee considered the project, and believes that its similarity to other projects in this bill warrants its inclusion therein.

On March 14, 1962, the Secretary of the Interior and the Secretary of the Army entered into a memorandum of agreement regarding water resources. The part of the agreement that applies to the State of Alaska is as follows:

### 1. *Alaska*

It is agreed that, because of its longstanding interest in all natural resources development matters in Alaska, the Department of the Interior shall provide leadership in undertaking comprehensive studies for natural resources development in Alaska, including water and power development. Consistent with its responsibility for marketing of power produced at Federal hydroelectric projects, it is also agreed that the Department of the Interior shall be responsible for the operation and maintenance of completed hydroelectric power projects in Alaska.

It is agreed that, because it must maintain an organization engaged in civil and military planning and construction in Alaska, the U.S. Army Corps of Engineers shall have responsibility for engineering design and construction of all water resources projects, including hydroelectric power projects, in Alaska. It is also agreed that the corps shall continue its studies of the Rampart Canyon project and shall complete its report.

It is agreed that the Department of the Interior shall make the necessary power marketing studies in connection with the Rampart Dam project and shall initiate, in cooperation with the State of Alaska and interested Federal agencies, broad comprehensive studies of the effect of this project on all natural resources. This study shall be completed prior to any recommendations for authorization of the Rampart Dam project. The Department of the Interior shall also report as soon as possible on markets for power to be generated at any other major hydroelectric project in Alaska recommended for authorization.

This agreement will avoid the establishment of a duplicate construction organization in the State of Alaska and, at the same time, it will stimulate the broadest participation in comprehensive water resources planning.

The effect of the amendment would be to remove the Bureau of Reclamation as the construction agency and substitute the Corps of Engineers. The Bureau would plan the project and operate and maintain it after construction.

### THE PROJECT

The development plan for this project was created pursuant to the provisions of the act of August 9, 1955 (69 Stat. 618) which was the result of a bill (H.R. 3990) introduced in 1955, during the 84th Congress, 1st session. That act, Public Law 84-322, authorized the Secretary of the Interior to "make investigations of projects for the conservation, development, and utilization of the water resources of Alaska and to report thereon, with appropriate recommendations, from time to time, to the President and to the Congress."

The proposed Snettisham hydroelectric project is approximately 38 miles south of Juneau, Alaska, in an area rich in timber and mineral resources. In the completed project,



power would be developed by the fall of water through tunnels drilled from sea level to Crater Lake and to Long Lake, 1,022 and 815 feet above the Speel River. From the powerplant at tidewater, a 38.7-mile transmission line could carry the power north to Juneau.

The history of the Snettisham project goes back many years. The first recorded study was conducted in 1913, almost 50 years ago. Since that time, the project has been thoroughly studied and the various alternatives for power generation in the Juneau area have been exhaustively explored. After 1913, for instance, studies relating to the power potentials of Crater Lake, Long Lake, and Speel River area were conducted in 1922, 1928, 1947, 1948, 1951, 1952, 1955, and 1956.

In 1959, the Bureau of Reclamation completed its feasibility report for this project. There have also been additional studies relating to the Snettisham project. For instance, the Alaska power market survey was completed by the Federal Power Commission in May 1960, and the report of the Alaska International Rail and Highway Commission was completed by the Battelle Institute of 1961. Finally, in November 1961, the Bureau of Reclamation published its reappraisal of the project.

The plan originally recommended in the 1959 report of the Bureau of Reclamation proposed construction of the project in a single stage. This involved a 48,000-kilowatt capacity powerplant, at a total cost of about \$40 million. Most of the power under this plan was to have been sold to the paper company which had negotiated contracts with the Forest Service for use, in a proposed newsprint mill, of the timber from the Tongass National Forest.

To implement the recommendations of the Bureau of Reclamation, S. 3095 was introduced during the 86th Congress. S. 3095 was identical to the current bill, S. 594. However, the paper company which was to have purchased the power from the Snettisham project abandoned its plans for the construction of a papermill. The Bureau of Reclamation therefore revised its estimates of the Snettisham project's future power market. Instead of planning for the sale of a large block of industrial power, the Bureau of Reclamation, in its revised plan of November 1961 and in its April 17, 1962, report on S. 594, proposes to gear the project to the power needs of residential, commercial, small industrial, and public agency power users in the Juneau area. Instead of constructing, in a single stage, a plant with 48,000-kilowatt capacity, the Bureau's plan now calls for an increase in installed generating capacity from 48,000 to 60,000 kilowatts. However, the project will be constructed in three 20,000-kilowatt stages, each stage being geared to the future demands for power in the Juneau area. The plan estimates that second and third stages will be started 8 and 16 years after completion of the first stage. Moreover, in the event that

large industrial development should take place, the revised plan indicates that the scheduling of the second and third stages of the project can be advanced.

The total cost of construction is estimated at \$41,634,000 and the total Federal investment, including interest during construction, would be about \$43,810,000. Investment cost associated with each stage of development would be repaid with interest from net revenues of power and energy sales at an effective rate of 7.47 mills per kilowatt-hour for firm energy and 5 mills per kilowatt-hour for nonfirm energy. It is estimated that average annual benefits would exceed annual costs in the ratio of 2.94 to 1 for a 100-year period of analysis, and 2.18 for a 50-year analysis.

Power demands in the Juneau area are increasing at an accelerated pace because of population increases and growth in per capita consumption of power. In 10 years, the population of Juneau has grown 14 percent, from 5,956 in 1950 to 6,797 in 1960. The U.S. Bureau of the Census statistics for the Juneau area lists the population as 9,745 in 1960.

The November 1961 project reappraisal for the Snettisham project, estimated that "probable future power requirements will increase at an average annual rate of 10 percent or more during the next several years."

Along with satisfying the increased needs and demands for power which are projected for the Juneau area over the coming years, the Snettisham project will also have a stimulating effect on the development of resources and on general economic growth in southeast Alaska. Such resources include timber, minerals, fisheries, tourism, and recreation.

Studies by the Department of the Interior and other competent groups have demonstrated the vast timber and mineral resource potentials of the Juneau area. For example, recent reports by the Arthur D. Little Co. indicate the feasible alternatives for future industrial development in the Juneau area, particularly in mining and forest products. One study, "Alaska's Forest Resources as a Base for Industrial Development," mentions the feasibility of developing a pulpmill, sawmill, and plywood mill in the Juneau area. Another report, "Alaska's Mineral Resources as a Base for Industrial Development," outlines in detail the possibilities for developing the iron ore deposit at Port Snettisham, about 35 miles southeast of Juneau. The report of the Department of the Interior on the Snettisham project, in relating the industrial potential of Juneau to the resources of the Tongass National Forest, states that "only three other States—Oregon, California, and Washington—have national forest sawtimber volumes greater than that of the Tongass," and that "it is estimated that at least 850 million board-feet could be taken yearly in perpetuity." Mention is made of the possibilities of such additional forest products industries as a shingle mill and the manufacture of fish boxes, furniture, and treated piling.



In connection with its analysis of mineral resources in the Juneau area, the Interior Department report on Snettisham outlines the possibilities for development of nickel-copper, manganese, and iron ore deposits. The report by the Battelle Memorial Institute on "Transport Requirements for the Growth of Northwest North America" also outlines the potentials for industrial development in the Juneau area. In addition, the current development of the ferry system for southeast Alaska should serve to speed the development of tourism and the general growth of the Juneau area, thereby creating additional demands for power and possibly placing on existing power sources a strain which could not be borne except for the existence of Snettisham.

The Department of the Interior's studies of the Snettisham project have amply demonstrated the need for this project. Projected population growth in the Juneau area and the resultant demands for power have created a situation which, according to the Department of the Interior's report, may result in power shortages in the near future.

In fact, there may come a time when the natural growth of this part of Alaska is held back because of power shortages. This would be neither in the interest of Alaska nor of the United States. With the prospects for growth in the Juneau area, and with the demands for power already threatening to outpace supply, the need for such a project as Snettisham constantly grows greater.

This legislation has the support and approval not only of all Federal and State agencies concerned but also of private and public utility spokesmen, conservationists, local authorities in the area, and others. No opposition from any source was registered. The unanimity expressed is unusual and the Committee on Interior and Insular Affairs found it helpful and commendable.

*Committee recommendation.*—In view of the amendments proposed by the Department of the Interior transferring construction authority for the project to the Department of the Army, it appears that the Committee on Public Works also has official interest in the proposed legislation. Accordingly, the committee recommends authorization of the project.

## SECTION 205

### WAURIKA RECLAMATION PROJECT, OKLAHOMA

S. 114, a bill authorizing the Secretary of the Interior to construct, operate, and maintain the Waurika reclamation project, Oklahoma, passed the Senate June 26, 1962. There is ample precedent for authorization of projects of this nature in a flood control bill. The committee considered the project, believes it justified, and recommends its inclusion in this bill.



## LOCATION AND DESCRIPTION OF THE PROJECT

S. 114, introduced by Senators Kerr and Monroney authorizes construction by the Secretary of the Interior of the multipurpose Waurika project in Oklahoma.

This project is located in southwestern Oklahoma in Jefferson, Stephens, Cotton, and Comanche Counties. Waurika damsite is in Jefferson County about 6 miles northwest of Waurika on Beaver Creek, a tributary of Red River. The urban areas which would be furnished water supplies from Waurika Reservoir surround the Beaver Creek Basin. The lands to be irrigated from the reservoir are located along the north bank of the Red River near Ryan, Okla., near the confluence of Beaver Creek, about 20 miles downstream from Waurika damsite.

The Waurika project would provide for maximum practicable regulation of Beaver Creek flows at the damsite for the dominant purpose of municipal and industrial water supply for six municipalities and an oil refinery and a vital national defense installation. It would provide for construction of the Waurika Dam and Reservoir; and aqueduct system to deliver Beaver Creek flows from the reservoir to the cities of Lawton (including Fort Sill), Duncan, Waurika, Comanche, Temple, Walters, and the DX-Sunray refinery; a pumping plant and distribution system at a point 20 miles below the damsite to deliver reservoir releases to lands in the vicinity of Ryan, Okla., for the irrigation of about 2,000 acres; and recreation and fish and wildlife facilities. The project would provide essentially full control of floods on Beaver Creek at the Waurika damsite and desirable flood control benefits along the Red River.

Need for flood control was emphasized at the hearings on the measure. Testimony indicated that in year after year the city of Waurika has been inundated by the waters of Beaver Creek. As recently as June 11, 1962, the committee received a communication from Senator Monroney advising that a new flood, similar to those previously reported had occurred. The Red Cross had set up shelters for 150 persons as 80 blocks flooded and 100 families had from 6 to 18 inches of water in their houses. From 200 to 250 people had to be evacuated. The Department report indicated that the flood control storage space in the reservoir would prevent floods along Beaver Creek from the damsite to its confluence with Cow Creek and substantially reduce flood hazards below that point. The operation would be in accordance with regulations prescribed by the Secretary of the Army.

Project studies indicate that the Waurika Reservoir will yield about 44,000 acre-feet of water annually. The predicted year 2015 demand is 39,000 acre-feet per year for municipal and industrial purposes. Until that year, there is ample surplus water available for irrigation of some 2,000 acres of land downstream from the reservoir. By the end of the initial 50-year municipal repayment period, needs for additional municipal water will then begin to encroach upon the supply available for irrigation.

Land classification studies established that ample high quality lands are available for irrigation development. The project studies also established that inclusion of irrigation as a project purpose, using water that is surplus to municipal and industrial needs, would be

economically justified. The increased crop returns which would result to the farmers and the increased income which would accrue to business interests in the surrounding areas supported this conclusion. They also established that the increased crop returns which would result from irrigation would permit the irrigators to pay all irrigation operation, maintenance, and replacement costs and repay all construction costs of the pumping plant and distribution system, as well as a portion of the joint reservoir costs allocated to irrigation. On the basis, utilization of the surplus water for irrigation of 2,000 acres was deemed merited and included in the project plan. It provides for full utilization of valuable land and water resources.

The project plan contemplates that operation of the reservoir would recognize the primary demand for satisfying municipal and industrial water requirements. On this basis, the first 115,000 acre-feet of the 155,000 acre-feet of conservation storage capacity would be jointly used for municipal and industrial water supply and irrigation purposes and the last 40,000 acre-feet would be reserved at all times for municipal and industrial use.

The National Park Service has concluded that the Waurika project could provide reservoir recreation opportunities of substantial value to the population of the general area. The plan provides for recreation facilities at and near the reservoir, as recommended by the National Park Service. Project funds would provide for land acquisition and construction of minimum basic facilities required for the protection and accommodation of the visiting public. These would include access roads, parking areas, water supply and sanitation, picnic areas, overlook developments, boat-launching ramps, beach developments, protective fencing, tree planting, and grass seeding. If found to be in the best interests of the Federal Government, funds would be transferred under appropriate agreement to the Division of Recreation and State Parks of the State of Oklahoma Planning and Resources Board for construction of these basic facilities. Additional recreation facilities not appropriate for Federal construction would be provided by local interests. After authorization, a more detailed recreation plan would be developed by cooperative efforts of Federal and State agencies and the water users' organization. Thus, full consideration would be given to recreation needs, to safeguarding of the public health, and to problems of administering and supervising both the recreation and water supply functions of the reservoir.

Cost of project.....	\$25, 019, 500
Allocation :	
Municipal and industrial water.....	15, 856, 500
Irrigation .....	4, 044, 300
Flood control.....	2, 264, 800
Fish and wildlife.....	2, 486, 400
Recreation .....	367, 500
Total .....	25, 019, 500
Nonreimbursable .....	5, 118, 700
Benefit-cost ratio, 50 years.....	1.34 to 1
Waurika Dam and Reservoir.....	250, 300 acre-feet
Irrigation service.....	2, 000 acres



The Beaver-Cow Creek Watershed Development Association was formed by officials and citizens of Lawton, Duncan, Waurika, Comanche, Tempoe, and Walters to sponsor the Waurika project. This organization has been active throughout the investigation period of the Waurika project and has contributed funds and services toward the investigation. By formula resolution dated July 8, 1959, this association endorsed the plan of development and recommended the reimbursable project costs allocable to irrigation that are in excess of the payment capacity of the irrigators be underwritten by the municipal and industrial water users. This proposal provides that, after repayment of the reimbursable construction obligation of the project allocated to municipal and industrial uses, annual payments to the United States from payments by the municipal and industrial water supply users shall continue at approximately the same rate, together with payments by the irrigation water users, until that portion of construction costs allocated to irrigation is fully repaid. The association sponsored the now-organized Waurika Project Master Conservancy District, which agency would contract with the United States for repayment of reimbursable project costs.

## SECTION 206

### SMALL FLOOD CONTROL PROJECT AUTHORITY

The purpose of this section is to amend the existing Corps of Engineers authority to construct small flood control projects without specific congressional authorization by increasing the current Federal cost limitation from \$400,000 per project to \$1 million per project. Projects under this authority must be economically justified and complete within themselves. The Corps of Engineers plans and designs each project constructed under this program to provide the same project and same degree of protection that would have been recommended for that locality under congressional authorization procedures. The Federal funds allotted under this legislation must be sufficient to complete Federal participation in the project. Local cooperation required for these projects is similar to that normally required for regularly authorized projects.

The committee was advised that the existing small flood control project program has become an increasingly valuable vehicle for providing flood damage relief for localized damage areas—both urban and agricultural. Protection can be provided under this small project program in a significantly shorter time period than possible under regular authorization procedures. It is considered that the increase in individual project cost limitation to \$1 million per project will provide a desirable and reasonable extension of this useful program.

## SECTION 207

### REPAIR OF EXISTING FLOOD CONTROL, HURRICANE, AND BEACH EROSION CONTROL STRUCTURES

Section 207 of the bill reaffirms the authority set forth in section 5 of the Flood Control Act approved August 18, 1941, as amended, regarding the repair and restoration of existing flood control struc-



tures threatened or destroyed by floods, and extends the authority to include any federally authorized hurricane or shore protective structure damaged or destroyed by wind, wave, or water action of other than an ordinary nature when in the discretion of the Chief of Engineers such repair and restoration is warranted for the adequate functioning of the structure for hurricane or shore protection.

## SECTION 208

### RECREATION AUTHORITY

This section would authorize Federal agencies to apply to non-reservoir projects the policies concerning recreation which Congress has already established for reservoirs. There has been an amazing increase in the ownership of boats by the American people and they are utilizing Federal waterways and harbors extensively. There is, therefore, a need for providing at such projects for the safety and convenience of the public, in the same manner as the Federal Government provides for public use at reservoir projects. There is a strong demand that those using nonreservoir projects receive the same facilities as at Federal reservoirs, and there is a need for developing the full potentials of such projects in order to help meet the rapid increase in demand for water-based recreation. This matter has been neglected.

The committee has heard testimony on this proposed amendment to expand recreation authority and has noted that there is an increasing demand for water-based recreation. There are numerous opportunities existing for the development of recreation at harbors and at river projects other than reservoirs, and this amendment extends the basic authority to include all types of projects at which recreation can be justifiably provided.

## SECTION 209

### RELOCATION OF ROADS

The Flood Control Act of 1960 authorizes the Chief of Engineers to utilize existing public roads as a means of providing access during construction to authorized water resources projects, if he determines it to be in the public interest and would result in a saving in Federal cost over the cost of constructing a new road at Federal expense.

The Chief of Engineers would be authorized to improve, reconstruct and maintain such roads or contract with the local authorities having jurisdiction over the road, to accomplish the necessary work, and he may acquire necessary lands or easements, if deemed advisable.

Upon completion of the project, if considered necessary, the road will be restored to as good condition as before using for access purposes, after which the responsibility of the Chief of Engineers for improvement, reconstruction and maintenance would cease. The language contained in this amendment would extend the same authority to the Bureau of Reclamation, U.S. Department of Interior.

The committee believes that this authority is meritorious and is economical to the Federal Government.

The Flood Control Act of 1960 also provided authority for the Chief of Engineers to replace existing public roads necessitated by the construction of water resource development projects. This amendment would extend this authority of the Bureau of Reclamation, U.S. Department of Interior.

The amendment provides that the roads to be constructed as replacements for existing roads may be constructed to standards comparable to those of the State, or, where applicable standards do not exist, those of the owning political division in which the road is located, for roads of the same classification as the road being replaced, taking into account the traffic existing at the time of taking.

The amendment provides that, when a political subdivision requests that a substitute road be constructed to higher standards, then they shall agree to pay the additional costs involved due to such higher standards. The share of the costs allocable to the Federal project shall be nonreimbursable.

It is not the intention of the committee to construe that every road taken in a reservoir area should be replaced but where a replacement road is provided, it should be constructed to such standards as is required to serve the traffic needs as well as the road which it replaces.

## SECTION 210

### FLOOD CONTROL SURVEYS

This is the customary section providing for authorization for flood control surveys and investigations at various localities. It is similar to section 108 of title I, and covers surveys at the following locations:

Valenciana River, Puerto Rico.

Waccasassa River (Levy County and Gilchrist County, Fla.

Lake Pontchartrain, North Shore, La.

Peytons Creek and tributaries, Tex.

Clear Creek, Tex.

San Bernard River, Tex.

Arkansas River Basin, with reference to the effect of the Eufaula and Keystone Reservoirs, Okla., on the water supply facilities of the cities of McAlester and Yale, respectively, with a view to determining the extent of Federal participation in the replacement of the cities' water supply facilities in equity without regard to limitation contained in existing Corps of Engineers protective and relocation plans.

Cumberland River, Kentucky and Tennessee, with reference to the effect of the Barkley Dam project, on the water supply and sewage treatment facilities of the cities of Cadiz, Kuttawa, and Eddyville, Ky., and the State Penitentiary at Eddyville, Ky., respectively, with a view to determining the extent of Federal participation in the replacement of their water supply and sewage treatment facilities in equity without regard to limitation contained in existing Corps of Engineers protective and relocation plans.

Missouri River Basin, with reference to the effect of Oahe and Garrison Reservoirs, N. Dak. and S. Dak., on the sewage treatment facilities of the cities of Bismarck and Mandan, N. Dak., respectively, with a view to determining the extent of Federal participation in the sewage treatment facilities in equity without regard to limitation con-



tained in existing Corps of Engineers protective and relocation plans.

All streams in Santa Barbara County, Calif., draining the Santa Ynez Mountains, except Santa Ynez River and tributaries.

Sacramento River Basin and streams in northern California draining into the Pacific Ocean for the purposes of developing, where feasible, multiple-purpose water resource projects, particularly those which would be eligible under the provisions of title III of Public Law 85-500.

Battle Creek, Sacramento River, Calif.

Kaskaskia River Levees, Ill.; Review of requirements of local cooperation.

Puget Sound, Wash., and adjacent waters, including tributaries, in the interest of flood control, navigation, and other water uses and related land resources.

Harbors and rivers in Hawaii, with a view to determining the advisability of improvements in the interest of navigation, flood control, hydroelectric power development, water supply, and other beneficial water uses, and related land resources.

Waimea River, Kokee area, Kauai, Hawaii, for multiple purposes.

Waipio River, Kohala-Hamakua coast, Island of Hawaii, for multiple purpose development.

Iao River, Wailuku, Maui, Hawaii.

The committee had before it testimony and letters requesting authorization for funds to relocate, construct, and operate sewage disposal plants in many areas where the construction of Federal reservoirs has made it necessary to alter the former method of handling municipal sewage disposal.

The committee recognizes the burden to the affected communities but feel that with other programs of assistance available through the Federal Government each case should be worked out by application for assistance to the appropriate Federal agency. For example, under Public Law 660 the Public Health Service can participate on disposal plants approved by the State Health Agency. The Community Facilities Administration of the Housing and Home Finance Agency can assist, as can the Area Redevelopment Administration in the Department of Commerce. The Congress has passed and the President has signed into law the Accelerated Public Works Act which in some instances would be applicable.

Some of the projects that were submitted are in areas where the reservoirs will not be filled for several years and, therefore, do not present an emergency situation. This gives ample time to work out a solution to the problem at hand.

The committee believes that the matter should be investigated at specific locations, and recommends certain surveys to accomplish such studies.

## SECTION 211

### MISSOURI RIVER BASIN—DEPARTMENT OF THE INTERIOR

This section provides an increase in the basin authorization for the portion of the comprehensive plan for the Missouri River Basin under the jurisdiction of the Bureau of Reclamation of the Department of



the Interior. It has been customary to increase the monetary authorization for the Department of the Interior as such increase is needed, in the same manner as increases are provided for the Corps of Engineers for their portion of the Missouri River Basin plan. Information was received from the Secretary of the Interior which fully justified the need for increased authorization so that appropriations for the work already approved by Congress can continue to be made.

Section 9(3) of the Flood Control Act of 1944 authorized the appropriation of \$200 million for the partial accomplishment of the works to be undertaken by the Secretary of the Interior in connection with the initial stages of the Missouri River Basin project. Subsequent authorizations have increased this limitation.

Authorizations made are as follows:

Flood Control Act of 1944.....	\$200, 000, 000
Flood Control Act of 1946.....	150, 000, 000
Flood Control Act of 1950.....	200, 000, 000
Flood Control Act of 1958.....	200, 000, 000
Flood Control Act of 1960.....	60, 000, 000
Total authorizations to date.....	\$10, 000, 000

Annual appropriations by the Congress through June 30, 1962, have utilized all but about \$120 million of the total amount authorized. Budget for fiscal year 1963 was about \$57 million for the Missouri River Basin project, leaving an estimated balance of authorization as of June 30, 1963, of about \$63 million. Fund requirements for the project for fiscal years 1964 and 1965 are currently estimated at \$150 million, which would leave a deficit of \$87 million over the balance of existing authorization.

The total estimated cost of the long-range ultimate program of the Bureau of Reclamation in the Missouri River Basin is about \$3 billion.

The committee believes that an increase in monetary authorization of \$100 million is necessary at this time.

#### INCREASES IN MONETARY AUTHORIZATIONS FOR COMPREHENSIVE RIVER BASIN PLANS

Congress, by the Flood Control Acts of 1936 and 1938, approved comprehensive plans for the development of many of the river basins throughout the Nation in the interest of flood control, navigation, hydroelectric power development, and other allied water uses. Although the approval extended to the entire plan in each case, the authorization of funds was limited to the anticipated appropriations for the next several years. In subsequent acts, Congress approved plans for new projects, and increased the monetary authorizations for those basins previously authorized to the extent necessary to provide for anticipated appropriations. When the authorization limit is approached, enactment of legislation is required to provide for additional increases in the monetary ceilings.

At the present time, there are 20 basin plans that are subject to monetary limitations located in nearly all sections of the country. They range from the Connecticut River Basin in New England to the Los Angeles River Basin in California. In addition to the projects

that are part of the basin plan, subject to a monetary limitation, there are, in a number of instances, other projects in the basin that have full monetary authorizations for appropriations. Projects in this latter category require no further authorization action by the Congress.

The committee requested the Chief of Engineers to analyze each comprehensive river basin plan that was subject to a monetary limitation with a view to determining which plans would require additional monetary authorization. The Chief of Engineers concluded that in order to cover appropriations for a 2-year period, that is 2 years beyond the present budget year or through fiscal year 1965, monetary authorizations in the amount of \$805 million will be required. If this amount of authorization is made available this year, additional increases would not be required until calendar year 1964 to cover the budget request for fiscal year 1966. The amount requested for 2 years will cover deficiencies in 11 river basin plans as follows:

*Comprehensive river basin plans—Monetary authorization required to cover a period of 2 years (fiscal years 1964-65)*

[In thousands]

MONETARY AUTHORIZATIONS CONTAINED IN TITLE I

River basin	Available monetary authorization	Proposed and actual funding through fiscal year 1965	Deficit monetary authorization	Additional monetary authorization required
Great Lakes-Hudson River Waterway, N.Y. ....	\$27,000	\$27,733	\$733	\$1,000
Total .....				1,000

MONETARY AUTHORIZATIONS CONTAINED IN TITLE II

Arkansas .....	509,773	691,677	181,904	182,000
Brazos .....	61,000	81,064	20,064	21,000
Central and southern Florida .....	106,300	135,612	29,312	30,000
Columbia .....	723,300	948,790	225,490	226,000
Los Angeles .....	286,041	323,474	37,433	38,000
Missouri .....	1,246,094	1,385,116	139,022	140,00000
Ohio .....	757,514	877,483	119,969	120,000
Upper Mississippi .....	77,300	107,306	30,006	31,000
West Branch, Susquehanna River .....	25,000	29,549	4,549	5,000
White .....	276,000	286,153	10,153	11,000
Total .....				804,000
Grand total .....				805,000

SECTION 212

This section identifies title I of the bill as the Flood Control Act of 1962.

CHANGES IN EXISTING LAW

In compliance with subsection (4) of rule XXIX of the Standing Rules of the Senate, changes in existing law made by the bill as reported are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italics, existing law in which no change is proposed is shown in roman) :



## PUBLIC LAW 826—84TH CONGRESS

(July 28, 1956, 33 U.S.C. 426e-h)

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the Act entitled "An Act authorizing Federal participation in the cost of protecting the shores of publicly owned property", approved August 13, 1946, is hereby amended to read as follows: "That (a) with the purpose of preventing damage to the shores of the United States, its Territories and possessions and promoting and encouraging the healthful recreation of the people, it is hereby declared to be the policy of the United States, subject to the following provisions of this Act to assist in the construction, but not the maintenance, of works for the restoration and protection against erosion, by waves and currents, of the shores of the United States, its Territories and possessions.

"(b) The Federal contribution in the case of any project referred to in subsection (a) shall not exceed [one-third] *one-half* of the cost of the project, and the remainder shall be paid by the State, municipality, or other political subdivision in which the project is located [.] *, except that the costs allocated to the restoration and protection of Federal property shall be borne fully by the Federal Government, and, further, the Federal participation in the cost of a project for restoration and protection of State, county, and other publicly owned shore parks and conservation areas may be, in the discretion of the Chief of Engineers, not more than 70 per centum of the total cost exclusive of land costs, when such areas: Include a zone which excludes permanent human habitation; include but are not limited to recreational beaches; satisfy adequate criteria for conservation and development of the natural resources of the environment; extend landward a sufficient distance to include, where appropriate, protective dunes, bluffs, or other natural features which serve to protect the uplands from damage; and provide essentially full park facilities for appropriate public use, all of which shall meet with the approval of the Chief of Engineers;*

"(c) When in the opinion of the Chief of Engineers the most suitable and economical remedial measures would be provided by periodic beach nourishment, the term 'construction may be construed for the purposes of this Act to include the deposit of sand fill at suitable intervals of time to furnish sand supply to project shores for a length of time specified by the Chief of Engineers.

"(d) Shores other than public will be eligible for Federal assistance if there is benefit such as that arising from public use or from the protection of nearby public property or if the benefits to those shores are incidental to the project, and the Federal contribution to the project shall be adjusted in accordance with the degree of such benefits.

"(e) No Federal contribution shall be made with respect to a project under this Act unless the plan therefor shall have been specifically adopted and authorized by Congress after investigation and study by the Beach Erosion Board under the provisions of section 2 of the River and Harbor Act approved July 3, 1930, as amended and supplemented [.] *, or, in the case of a small project under section 3 of this Act, unless the plan therefor has been approved by the Chief of Engineers"; and*



["SEC. 2. When the Chief of Engineers shall find that any such project has been constructed in accordance with the authorized plans and specifications he shall cause to be paid to the State, municipality, or other political subdivision involved the amount authorized by Congress.

"SEC. 3. The Chief of Engineers may, in his discretion, from time to time, make payments on such construction as the work progresses, but these payments, including previous payments, if any, shall not be more than the United States pro rata part of the value of the labor and materials which have been actually put into such construction in conformity to said plans and specifications: *Provided*, That the construction of restoration and protective works under this Act may be undertaken by the Chief of Engineers upon the request of, and contribution of required funds by, the interested State, municipality, or other political subdivision.]"

*"Sec. 2. The Secretary of the Army is hereby authorized to reimburse local interests for work done by them, after initiation of the survey studies which form the basis for the project, on authorized projects which individually do not exceed \$1,000,000 in total cost: Provided, That the work which may have been done on the projects is approved by the Chief of Engineers as being in accordance with the authorized projects: Provided further, That such reimbursement shall be subject to appropriations applicable thereto or fund available therefor and shall not take precedence over other pending projects of higher priority for improvements.*

*"Sec. 3. The Secretary of the Army is hereby authorized to undertake construction of small shore and beach restoration and protection projects not specifically authorized by Congress, which otherwise comply with section 1 of this Act, when he finds that such work is advisable, and he is further authorized to allot from any appropriations heretofore or hereafter made for civil works, not to exceed \$3,000,000 for any one fiscal year for the Federal share of the costs of construction of such projects: Provided, That not more than \$400,000 shall be allotted for this purpose for any single project and the total amount allotted shall be sufficient to complete the Federal participation in the project under this section including periodic nourishment as provided for under section 1(c) of this Act: Provided further, That the provisions of local cooperation specified in section 1 of this Act shall apply: And provided further, That the work shall be complete in itself and shall not commit the United States to any additional improvement to insure its successful operation, except for participation in periodic beach nourishment in accordance with section 1(c) of this Act, and as may result from the normal procedure applying to projects authorized after submission of survey reports."*

*(b) All provisions of existing law relating to surveys of rivers and harbors shall apply to surveys relating to shore protection and any expenses incident and necessary to investigation and study shall be paid from funds for general investigations, civil functions, Department of the Army, and section 2 of the River and Harbor Act approved July 3, 1930, as amended (33 U.S.C. 426), is modified to the extent inconsistent herewith.*

(c) *The cost-sharing provisions of this Act shall apply in determining the amounts of Federal participation in or payments toward the costs of authorized projects which have not been substantially completed prior to the date of approval of this Act, and the Chief of Engineers, through the Beach Erosion Board, is authorized and directed to recompute the amounts of Federal contribution toward the costs of such projects accordingly.*

"SEC. 4. As used in this Act, the word 'shores' includes all the shorelines of the Atlantic and Pacific Oceans, the Gulf of Mexico, the Great Lakes, and lakes, estuaries, and bays directly connected therewith."

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PUBLIC LAW 500—85TH CONGRESS

SECTION 110

(f) There is hereby authorized to be appropriated the sum of \$2,000,000 to carry out the provisions of this section [.] , *"and upon completion of transfer to the said State of all right, title, and interest of the United States in and to the canal in accordance with the agreement executed December 14, 1960, between the Chief of Engineers and the representatives of said State, the additional sum of \$800,000 is hereby authorized to be appropriated to be expended by the Corps of Engineers, or by said State, for the repair and modification of any canal properties and appurtenances, notwithstanding the provisions of section 110 (b) hereof."*

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PUBLIC LAW 500, 85TH CONGRESS

FLOYD RIVER AND TRIBUTARIES, IOWA

(H. Doc. 417, 84th Cong.)

Provided responsible local interests give assurances satisfactory to the Secretary of the Army that they will (a) furnish without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project; (b) hold and save the United States free from damages due to the construction works; [(c) make without cost to the United States all necessary road, highway, highway bridge, and utility alterations and additions; ] ; (c) *make without cost to the United States all necessary road, highway, highway bridges other than those required to carry Interstate Highway 29 over the relocated River, and utility alterations and additions;* (d) contribute in cash 0.84 percent of the estimated first cost of the work for which the United States would be responsible, a contribution presently estimated at \$65,000; (e) upon authorization of the project, to take all possible action under Iowa law, short of actual purchase, to prevent additional developments within the right-of-way that might increase the overall cost of the project; and (f) maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army.



## PUBLIC LAW 685—84TH CONGRESS

SEC. 205. That the Secretary of the Army is hereby authorized to allot from any appropriations heretofore or hereafter made for flood control, not to exceed **[\$10,000,000]** *\$25,000,000* for any one fiscal year for the construction of **[small flood-control projects]** *small project for flood control and related purposes* not specifically authorized by Congress, and not within areas intended to be protected by projects so authorized, which come within the provisions of section 1 of the Flood Control Act of June 22, 1936, when in the opinion of the Chief of Engineers such work is advisable: **[Provided, That not more than \$400,000 shall be allotted for this purpose at any single locality from the appropriations for any one fiscal year:]** *Provided, That not more than \$10,000,000 shall be allotted under this section for a project at any single locality and the amount allotted shall be sufficient to complete Federal participation in the project* and; **Provided further,** That the provisions of local cooperation specified in section 3 of the Flood Control Act of June 22, 1936, as amended, shall apply: And provided further, That the work shall be complete in itself and not commit the United States to any additional improvement to insure its successful operation, except as may result from the normal procedure applying to projects authorized after submission of preliminary examination and survey reports.

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## PUBLIC LAW 99—84th CONGRESS

(Approved June 28, 1955, 69 Stat. 186)

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That section 5 of the Flood Control Act of August 18, 1941, as amended by section 210 of the Flood Control Act of 1950, is hereby further amended to read as follows: "That there is hereby authorized an emergency fund in the amount of \$15,000,000 to be expended in flood emergency preparation; in flood fighting and rescue operations, or in the repair or restoration of any flood-control work threatened or destroyed by flood, including the strengthening, raising, extending, or other modification thereof as may be necessary in the discretion of the Chief of Engineers for the adequate functioning of the work for flood control **[.]** ; *in the emergency protection of federally authorized hurricane or shore protection being threatened when in the discretion of the Chief of Engineers such protection is warranted to protect against imminent and substantial loss to life and property; in the repair and restoration of any federally authorized hurricane or shore protective structure damage or destroyed by wind, wave, or water action of other than an ordinary nature when in the discretion of the Chief of Engineers such repair and restoration is warranted for the adequate functioning of the structure for hurricane or shore protection.* The appropriation of such moneys for the initial establishment of this fund and for its replenishment on an annual basis, is hereby authorized: **Provided,** That pending the appropriation of said sum, the Secretary of the Army may allot, from existing **[flood control]** *civil*



*functions* appropriations, such sums as may be necessary for the immediate prosecution of the work herein authorized, such appropriations to be reimbursed from the appropriation herein authorized when made. The Chief of Engineers is authorized, in the prosecution of work in connection with rescue operations, or in conducting other [flood] emergency work, to acquire on a rental basis such motor vehicles, including passenger cars and buses, as in his discretion are deemed necessary."

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## PUBLIC LAW 780—83D CONGRESS

## TITLE I—RIVERS AND HARBORS

SEC. 209. That section 4 of the Act approved July 24, 1946 (Public, Numbered 526, 79th Congress), is amended to read as follows: "The Chief of Engineers, under the supervision of the Secretary of the Army, is authorized to construct, maintain, and operate public park and recreational facilities [in reservoir areas under the control of the Department of the Army, and to permit the construction, maintenance, and operation of such facilities. The Secretary of the Army is also authorized to grant leases of lands, including structures or facilities thereon, in reservoir areas for such periods, and upon such terms and for such purposes as he may deem reasonable in the public interest:] *at water resource development projects under the control of the Department of the Army, to permit the construction of such facilities by local interests (particularly those to be operated and maintained by such interests), and to permit the maintenance and operation of such facilities by local interests. The Secretary of the Army is also authorized to grant leases of lands, including structures or facilities thereon, at water resource development projects for such periods, and upon such terms and for such purposes as he may deem reasonable in the public interest:* Provided, That leases to nonprofit organizations for park or recreational purposes may be granted at reduced or nominal considerations in recognition of the public service to be rendered in utilizing the leased premises: *Provided further,* That preference shall be given to Federal, State, or local governmental agencies, and licenses, or leases where appropriate, may be granted without monetary considerations, to such agencies for the use of all or any portion of a [reservoir] *project* area for any public purpose, when the Secretary of the Army determines such action to be in the public interest, and for such periods of time and upon such conditions as he may find advisable: *And provided further,* That in any such lease or license to a Federal, State, or local governmental agency which involves lands to be utilized for the development and conservation of fish and wildlife, forests, or other natural resources, the licensee or lessee may be authorized to cut timber and harvest crops as may be necessary to further such beneficial uses and to collect and utilize the proceeds of any sales of timber and crops in the development, conservation, maintenance and utilization of such lands. Any balance of proceeds not so utilized shall be paid to the United States at such time or times as the Secretary of the Army may de-

termine appropriate. The water areas of all such [reservoirs] *projects* shall be open to public use generally, without charge, for boating, swimming, bathing, fishing, and other recreational purposes, and ready access to and exit from such [water] areas along the shores of such [reservoirs] *projects* shall be maintained for general public use, when such use is determined by the Secretary of the Army not to be contrary to the public interest, all under such rules and regulations as the Secretary of the Army may deem necessary. No use of any area to which this section applies shall be permitted which is inconsistent with the laws for the protection of fish and game of the State in which such area is situated. All moneys received by the United States for leases or privileges shall be deposited in the Treasury of the United States as miscellaneous receipts."

**[SEC. 207. (a)** That whenever, in connection with the construction of any authorized flood control, navigation or multiple-purpose project for the development of water resources, the Chief of Engineers, under the direction of the Secretary of the Army, determines it to be in the public interest to utilize existing public roads as a means of providing access to such projects during construction, he may, at his discretion, improve, reconstruct and maintain such roads and he may contract with the local authority having jurisdiction over the roads to accomplish the necessary work. The accomplishment of such work may be carried out with or without obtaining any interest in the land on which the road is located in accordance with mutual agreement between the parties: *Provided*, (1) That the Chief of Engineers determines that such work would result in a saving in Federal cost as opposed to the cost of providing a new access road at Federal expense, (2) That, at the completion of construction, the Chief of Engineers will, if necessary, restore the road to at least as good condition as prior to the beginning of utilization for access during construction, and (3) That, at the completion of construction, the responsibility of the Chief of Engineers for improvement, reconstruction and maintenance shall cease.

(b) That, for such water resources projects, under construction or to be constructed, when the taking by the Federal Government of an existing public road necessitates replacement, the substitute provided will as nearly as practicable serve in the same manner and reasonably as well as the existing road. The Chief of Engineers is authorized to construct such substitute roads to design standards comparable to those of the State in which the road is located, for roads of the same classification as the road being replaced. The traffic existing at the time of the taking shall be used in the determination of the classification.]

*"Sec. 207. (a) When used in this section—*

*“(1) The term ‘Agency’ means the Corps of Engineers, United States Army or the Bureau of Reclamation, United States Department of the Interior, whichever has jurisdiction over the project concerned.*



“(2) The term ‘head of the Agency concerned’ means the Chief of Engineers or the Commissioner, Bureau of Reclamation, or their respective designees.

“(3) The term ‘water resources projects to be constructed in the future’ includes all projects not yet actually under construction, and, to the extent of work remaining to be completed, includes projects presently under construction where road relocations or identifiable components thereof are not complete as of the date of this section.

“(4) The term ‘time of the taking’ is the date of the relocation agreement, the date of the filing of a condemnation proceeding, or a date agreed upon between the parties as the date of taking.

“(b) Whenever, in connection with the construction of any authorized flood control, navigation, irrigation, or multiple-purpose project for the development of water resources, the head of the Agency concerned determines it to be in the public interest to utilize existing public roads as a means of providing access to such projects during construction, such Agency may improve, reconstruct, and maintain such roads and may contract with the local authority having jurisdiction over the roads to accomplish the necessary work. The accomplishment of such work of improvement may be carried out with or without obtaining any interest in the land on which the road is located in accordance with mutual agreement between the parties: Provided, (1) That the head of the Agency concerned determines that such work would result in a saving in Federal cost as opposed to the cost of providing a new access road at Federal expense, (2) that, at the completion of construction, the head of the Agency concerned will, if necessary, restore the road to at least as good condition as prior to the beginning of utilization for access during construction, and (3) that, at the completion of construction, the responsibility of the Agency for improvement, reconstruction, and maintenance shall cease.

“(c) For water resources projects to be constructed in the future, when the taking by the Federal Government of an existing public road necessitates replacement, the substitute provided will, as nearly as practicable, serve in the same manner and reasonably as well as the existing road. The head of the Agency concerned is authorized to construct such substitute roads to design standards comparable to those of the State, or, where applicable State standards do not exist, those of the owning political division in which the road is located, for roads of the same classification as the road being replaced. The traffic existing at the time of the taking shall be used in the determination of the classification. In any case where a State or political subdivision thereof requests that such a substitute road be constructed to a higher standard than that provided in the preceding provisions of this subsection, and pays, prior to commencement of such construction, the additional costs involved due to such higher standard, such Agency head is authorized to construct such road to such higher standard. Federal costs under the provisions of this subsection shall be part of the nonreimbursable project costs.”



MINORITY VIEWS ON THE KNOWLES PROJECT AND  
THE CHINA GARDENS PROJECT

The undersigned believe the testimony before the Committee raised reasonable grounds for further consideration of the Knowles Project and the China Gardens Project. We believe the two projects should be deleted from this bill.

The Knowles Project on the Flathead River in Montana was quite controversial with impressive testimony, as the printed hearings show, raising considerable doubt on the following points:

- (1) It is an economic detriment to the area.
- (2) It is not a feasible project.
- (3) It is not needed for flood control.
- (4) It would be detrimental to recreation and fish, wildlife and other conservation resources.
- (5) There are feasible alternative projects available.
- (6) Treaty Rights of the Flathead Indians are jeopardized by the Project.

The China Gardens Project on the Snake River in Idaho and Oregon would also function as a regulating project for the High Mountain Sheep Project upstream. The High Mountain Sheep Project has been deferred. Therefore, it seems the China Gardens Project should be deferred for further consideration.

A non-Federal entity that has a pending license application with the Federal Power Commission for High Mountain Sheep has committed itself, during hearings before the Subcommittee, to undertake the construction of the China Gardens Project if a license is issued to it for the High Mountain Sheep Project. The question of license should be resolved within a year.

It is evident that no construction funds for China Gardens are to be voted, and that none have been or will be requested in the current year.

The non-Federal entity has indicated no objection to Federal construction of China Gardens should a license for High Mountain Sheep be denied to it. Accordingly, nothing is lost by postponing action on China Gardens.

We see no justification for Federal construction of a project where a competent, resourceful, non-Federal body stands ready to build the same project and provide the same public benefits.

J. CALEB BOGGS.

JACK MILLER.

JAMES B. PEARSON.

MAURICE J. MURPHY, Jr.

# APPENDIX

## List of projects by States—S. 3373 as reported

State and project

	Estimated cost
Alabama:	
(N) Walter F. George lock and dam.....	\$500, 000
Alaska:	
(P) Bradley Lake, Cook Inlet.....	45, 750, 000
(P) Snettisham project near Juneau.....	41, 634, 000
Arizona:	
(FC) Gila River—Camelsback Reservoir.....	9, 770, 000
(FC) Gila River below Painted Rock.....	18, 255, 000
(FC) Pinal Creek.....	1, 300, 000
Arkansas:	
(FC) Arkansas-Red Rivers, water quality.....	300, 000
(FC) Russellville (Dardanelle lock and dam).....	1, 400, 000
(FC) Village Creek, Jackson and Lawrence Counties.....	1, 968, 000
(FC) Village Creek (White River and Mayberry).....	1, 018, 000
(MP) White River Basin authorization.....	11, 000, 000
California:	
(MP) Alameda Creek.....	14, 680, 000
(MP) Chowchilla River (Buchanan Reservoir).....	13, 585, 000
(FC) Corte Madera Creek.....	5, 534, 000
(N) Dana Point Harbor.....	3, 730, 000
(MP) Fresno River (Hidden Reservoir).....	14, 338, 000
(MP) Los Angeles River Basin authorization.....	38, 000, 000
(FC) Mormon Slough.....	1, 960, 000
(N) Noyo River and Harbor.....	13, 231, 000
(N) Oakland Harbor.....	6, 775, 000
(N) Oakland Harbor (Fruitvale Bridge).....	1, 750, 000
(BE) Orange County.....	2, 845, 000
(FC) Redwood Creek.....	2, 580, 000
(MP) Russian River—Dry Creek.....	42, 400, 000
(FS) Santa Barbara County streams.....	
(N) Santa Barbara Harbor.....	3, 000, 000
(MP) Stanislaus River (New Meloens Reservoir).....	113, 717, 000
(BE) Ventura-Pierpont area.....	515, 000
(FS) Sacramento River Basin and northern streams.....	
(FS) Sacramento River—Battle Creek.....	
Connecticut:	
(HFP) Mystic—Groton.....	1, 490, 000
(FC) Naugatuck River, Ansonia-Derby.....	5, 620, 000
(HFP) New London.....	2, 401, 000
(HFP) Westport.....	217, 000
Florida:	
(FC) Boggy Creek (C. & S.).....	1, 176, 000
(N) Canaveral Harbor.....	5, 076, 000
(MP) Central and southern authorization.....	30, 000, 000
(FC) Cutler drain (C. & S.).....	2, 063, 000
(FC) Four River Basins.....	57, 760, 000
(N) Key West Harbor.....	820, 000
(BE) Palm Beach County.....	128, 800
(N) Pensacola Harbor.....	424, 000
(FC) Shingle Creek.....	3, 250, 000
(FC) South Dade County (C. & S.).....	13, 388, 000
(N) Tampa Harbor—Port Sutton and Ybor Channels.....	997, 000
(BE) Virginia Key and Key Biscayne.....	220, 000
(FC) West Palm Beach Canal.....	3, 220, 000
(FS) Waccasassa River, Levy County.....	

See Code at end of table.

# 332 RIVER AND HARBOR AND FLOOD CONTROL PROJECTS

State and project

	Estimated cost
Georgia:	
(MP) Chattahoochee River at Westpoint.....	\$52, 900, 000
(MP) Flint River.....	151, 820, 000
(NS) Kings Bay deepwater channel.....	-----
(N) Savannah Harbor turning basin.....	605, 000
Hawaii:	
(FS) Harbors in Hawaii.....	-----
(N) Kaunakakai Harbor, Molokai.....	7, 919, 000
(FS) Waimea River, Kokee Area.....	-----
(FS) Waipio River, Kohala-Hamakua coast.....	-----
(FS) Iao River, Wailuku, Maui.....	-----
Idaho:	
(MP) Upper Snake River—Blackfoot.....	829, 000
(MP) Upper Snake River—Burns Creek.....	52, 000, 000
(MP) Upper Snake River—Ririe.....	7, 027, 000
Illinois:	
(N) Calumet Harbor.....	11, 464, 000
(N) Chicago Harbor.....	1, 505, 000
(FC) Columbia Drainage and Levee District No. 3.....	986, 000
(FC) Harrisonville and Ivy Landing Drainage and Levee District No. 2.....	1, 112, 000
(MP) Illinois River comprehensive.....	71, 465, 000
(N) Illinois Waterway duplicate locks.....	40, 000, 000
(N) Kaskaskia River.....	58, 200, 000
(FCS) Kaskaskia River levees (local cooperation).....	-----
(FC) Prairie Du Pont Levee and Sanitary District.....	921, 000
(MP) Rend Lake.....	35, 500, 000
(FC) Richland Creek.....	4, 995, 000
(FC) Rock River, Rockford.....	7, 228, 000
(FC) Wabash River at Mount Carmel.....	1, 417, 000
Iowa:	
(FC) Floyd River.....	750, 000
(FC) Indian Creek.....	1, 270, 000
(FC) Mississippi River at Guttenberg.....	729, 000
(FC) Mississippi River—Hampton, Ill., to Cassville, Wis.....	5, 350, 000
(N) Mississippi River between Missouri River and Minneapolis, Minn.....	1, 205, 000
(MP) Upper Mississippi River Basin authorization.....	31, 000, 000
Kansas:	
(FC) Arkansas River, Dodge City.....	2, 133, 000
(MP) Big Hill Creek.....	3, 785, 000
(FC) Cow Creek.....	1, 560, 000
(MP) Kansas River.....	88, 070, 000
(FC) White Clay Creek at Atchison.....	3, 495, 000
Kentucky:	
(MP) Kentucky River.....	26, 020, 000
(FS) Cumberland River, Barkley Dam (water and sewage).....	-----
Louisiana:	
(N) Bayous Terrebonne, Petit Caillou, Grand Caillou, Du Large, and connecting channels.....	45, 000
(N) Calcasieu River saltwater barrier.....	3, 310, 000
(FS) Lake Pontchartrain, north shore.....	-----
(N) Mississippi River—Baton Rouge to Gulf.....	357, 000
(N) Mississippi River—Baton Rouge to Gulf, Devils Swamp.....	299, 500
(HFP) Mississippi River Delta at New Orleans.....	7, 502, 000
(FC) Red River and Tribs, Natchitoches.....	1, 293, 000
Maine:	
(N) Carvers Harbor.....	205, 000
(NS) Falmouth Harbor.....	-----
(N) Kennebunk Harbor.....	270, 000
(N) Narraguagus River.....	500, 000
(N) Portland Harbor.....	8, 340, 000
(N) Portsmouth Harbor.....	7, 500, 000
(N) Searsport Harbor.....	700, 000

See Code at end of table.



## State and project

		<i>Estimated cost</i>
	<b>Maryland:</b>	
(MP)	Potomac River, North Branch.....	\$50,965,000
	<b>Massachusetts:</b>	
(N)	Chelsea Harbor.....	2,843,000
(N)	Dorchester Bay and Neponset River.....	7,050,000
(N)	Gloucester Harbor.....	1,100,000
(N)	Marblehead Harbor.....	1,752,000
(BE)	New Bedford, Clarks Point.....	60,000
(N)	Plymouth Harbor.....	1,200,000
(NS)	Point Shirley and Deer Island.....	-----
(HFP)	Wareham-Marion.....	3,811,500
	<b>Michigan:</b>	
(N)	Caseville Harbor.....	327,000
(N)	Gladstone, Kipling (Little Bay deNoc).....	350,000
(N)	Leland Harbor.....	485,000
(N)	Muskegon Harbor.....	609,000
(N)	New Buffalo Harbor.....	667,000
(N)	Ontonagon Harbor.....	4,741,000
(FC)	River Rouge.....	8,659,000
(N)	Rouge River.....	257,000
(N)	Saginaw River.....	4,780,000
	<b>Minnesota:</b>	
(FC)	Warroad River and Bulldog Creek.....	972,000
	<b>Mississippi:</b>	
(MP)	Chunky Creek, Pascagoula River.....	6,740,000
(N)	Pascagoula Harbor.....	4,870,000
	<b>Missouri:</b>	
(N)	Mississippi River, Clarksville.....	103,300
(FC)	Mississippi River, Hampton, Ill., to Mile 300.....	9,289,000
(FC)	Mississippi River, Ste. Genevieve and St. Marys.....	2,500,000
(MP)	Missouri River Basin Authorization:	
	Corps of Engineers.....	140,000,000
	Bureau of Reclamation.....	100,000,000
(MP)	Osage River (Kaysinger Bluff Reservoir).....	43,245,000
(MP)	Salt River.....	63,300,000
(N)	Sandy Slough, Lincoln County.....	195,000
	<b>Nebraska:</b>	
(FC)	Papillion Creek.....	2,122,000
	<b>Nevada:</b>	
(FC)	Truckee River.....	2,385,000
	<b>New Hampshire:</b>	
(BE)	New Hampshire shoreline.....	88,000
	<b>New Jersey:</b>	
(NS)	Brigantine Inlet.....	-----
(NS)	Corsons Inlet.....	-----
(NS)	Little Egg Inlet.....	-----
(HFP & BE)	Raritan and Sandy Hook Bays.....	3,097,000
(N)	Raritan River.....	Maintenance
	<b>New Mexico:</b>	
(FC)	Alamagordo.....	2,040,000
(FC)	Rio Grande, Las Cruces.....	3,350,000
	<b>New York:</b>	
(FC)	Allegheny River, Salamanca.....	1,390,000
(N)	Buffalo Harbor.....	2,797,000
(N)	Buttermilk Channel.....	2,226,000
(N)	Flushing Bay.....	1,695,000
(N)	Great Lakes-Hudson River Waterway authorization.....	1,000,000
(N)	Great Sodus Harbor.....	765,000
(N)	Little Neck Bay.....	2,185,000
(N)	Oswego Harbor.....	1,180,000
(FC)	Rondout Creek and Wallkill River.....	5,111,000

See Code at end of table.

# 334 RIVER AND HARBOR AND FLOOD CONTROL PROJECTS

<i>State and project</i>	<i>Estimated cost</i>
North Carolina:	
(MP) Cape Fear River	\$25, 143, 000
(HFP) Carolina Beach	739, 000
(BE) Fort Macon—Atlantic Beach	194, 000
(N) Rollinson Channel	652, 000
(N) Wilmington Harbor	6, 370, 000
(HFP) Wrightsville Beach	345, 000
North Dakota:	
(MP) Grand River Basin	2, 670, 000
(FS) Oahe and Garrison Reservoirs, sewage treatment facilities at Bismarck and Mandan, N. Dak.	
Ohio:	
(NS) Auglaize River at Wapakoneta	
(N) Cleveland Harbor	888, 000
(N) Conneaut Harbor	6, 179, 000
(FC) Crab Creek at Youngstown	2, 268, 000
(BE) Erie Coast—Marblehead	658, 500
(N) Huron Harbor	8, 557, 000
(FC) Kokosing	2, 438, 000
(FC) Mad River above Huffman Dam	7, 930, 000
(MP) Ohio River Basin authorization	120, 000, 000
(BE) Ohio Shore—Sheffield Lake	100, 300
(FC) Sandusky River	4, 300, 000
(MP) Scioto River	55, 307, 000
Oklahoma:	
(MP) Arkansas River (Kaw Reservoir)	83, 230, 000
(MP) Arkansas River Basin authorization	182, 000, 000
(FS) Arkansas River—Eufaula and Keystone Reservoirs	
(MP) Broken Bow Reservoir, Mountain Fork River	23, 800, 000
(MP) Clayton and Tuskahoma Reservoirs, Kiamichi River	29, 748, 000
(MP) Verdigris River	62, 400, 000
(FC) Wybark	
(FC) Waurika River	25, 019, 500
Oregon:	
(N) Columbia and Lower Willamette Rivers	493, 000
(N) Columbia and Lower Willamette Rivers below Vancouver	20, 100, 000
(MP) Columbia River Basin authorization	226, 000, 000
(MP) Columbia River comprehensive	
(MP) Rogue River and tributaries	106, 700, 000
Pennsylvania:	
(MP) Delaware River	192, 400, 000
(N) Erie Harbor	671, 000
(MP) French Creek	23, 102, 000
(MP) Juniata River (Raystown Reservoir)	32, 150, 000
(FC) Lackawanna River	3, 596, 000
(MP) West Branch Susquehanna River authorization	5, 000, 000
Rhode Island:	
(HFP & BE) Narragansett Pier	1, 152, 000
(N) Pawtuxet Cove	210, 000
(HFP, BE & N) Point Judith	2, 414, 000
Tennessee:	
(MP) Big South Fork, Cumberland River	151, 000, 000
Texas:	
(MP) Brazos River Basin authorization	\$21, 000, 000
(FS) Clear Creek	
(FC) Clear Fork, Brazos River	31, 200, 000
(HFP) Freeport and vicinity	3, 780, 000
(N) Gulf Inland Waterway, Victoria	1, 590, 000
(N) Gulf Inland Waterway, La. and Tex. section	25, 540, 000
(N) Gulf Inland Waterway, Palacios	818, 000
(FS) Peytons Creek and tributaries	
(HFP) Port Arthur	23, 380, 000

See Code at end of table.

State and project	Estimated cost
Texas—Continued	
(FC) Red River below Denison Dam.....	
(N) Sabine Neches Waterway.....	\$20,830,000
(FS) San Bernard River.....	
(MP) Trinity River, East Fork.....	23,760,000
(N) Trinity River, Wallisville.....	9,162,000
(FC) Trinity, West Fork (Fort Worth Floodway).....	5,148,000
(FC) Vince and Little Vince Bayous.....	2,224,000
(FC) Wichita River, Lake Kemp.....	6,410,000
Virginia:	
(N) James River.....	39,000,000
(N) Lynnhaven Inlet and Bay.....	1,068,000
(HFP) Norfolk.....	1,537,000
(BE) Virginia Beach.....	
Washington:	
(N) Kingston Harbor (Puget Sound).....	428,000
(FS) Puget Sound.....	
(N) Swinomish Channel.....	887,000
(N) Tacoma Harbor.....	2,460,000
(MP) Wynoochee River.....	40,211,000
West Virginia:	
(FC) Buckhannon River.....	1,206,000
(MP) Guyandot.....	60,477,000
(MP) Twelvepole Creek.....	11,000,000
Wisconsin:	
(N) Green Bay Harbor.....	4,270,000
(N) Kenosha Harbor.....	673,000
(MP) Kickapoo River.....	15,570,000
(N) Manitowoc Harbor.....	719,000
(N) Milwaukee Harbor.....	4,029,000
(FC) Pecatonica River.....	850,000
Puerto Rico:	
(BE) San Juan.....	65,400
(FS) Valenciana River.....	
Total.....	3,510,885,800

Code:

(N) Navigation  
(FC) Flood control  
(BE) Beach erosion control  
(MP) Multiple purpose

Code:

(NS) Navigation survey  
(FS) Flood-control survey  
(HFP) Hurricane-flood protection  
(P) Power

# GENERAL LEGISLATION

Section 102—Reimbursement for beach erosion.

Section 103—Beach erosion amendments.

Section 104—Aquatic plant control.

Section 105—Transfer of Illinois and Mississippi to State of Illinois.

Section 106—Compilation of survey and review reports.

Section 107—Repair of Lock and Dam No. 3, Big Sandy River, Ky.

Section 108—Authorizing navigation surveys.

Section 109—Shirt title of bill.

Section 206—Small projects for flood control and other purposes.

Section 207—Flood control emergency funds, \$15 million.

Section 208—Amending recreation provision of the flood control acts to include navigation projects.

Section 209—Relocation of roads in reservoirs.

Section 210—Authorizes surveys.

Section 211—Basin authorization for Missouri River Basin for Bureau of Reclamation, \$100 million.

Section 212—Short title of bill.







Calendar No. 2220

87<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

**S. 3773**

[Report No. 2258]

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IN THE SENATE OF THE UNITED STATES

OCTOBER 1, 1962

Mr. KERR (for Mr. CHAVEZ), from the Committee on Public Works, reported the following bill; which was read twice and ordered to be placed on the calendar

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**A BILL**

Authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

3               **TITLE I—RIVERS AND HARBORS**

4       SEC. 101. That the following works of improvement of  
5       rivers and harbors and other waterways for navigation, flood  
6       control, and other purposes are hereby adopted and authorized  
7       to be prosecuted under the direction of the Secretary of the  
8       Army and supervision of the Chief of Engineers, in accord-  
9       ance with the plans and subject to the conditions recom-  
10      mended by the Chief of Engineers in the respective reports

1 hereinafter designated: *Provided*, That the provisions of  
2 section 1 of the River and Harbor Act approved March 2,  
3 1945 (Public Law Numbered 14, Seventy-ninth Congress,  
4 first session), shall govern with respect to projects author-  
5 ized in this title; and the procedures therein set forth with  
6 respect to plans, proposals, or reports for works of improve-  
7 ment for navigation or flood control and for irrigation and  
8 purposes incidental thereto, shall apply as if herein set forth  
9 in full:

10 NAVIGATION

11 Narraguagus River, Maine: House Document Numbered  
12 530, Eighty-seventh Congress, at an estimated cost of  
13 \$500,000;

14 Carvers Harbor, Vinalhaven, Maine: Senate Document  
15 Numbered 118, Eighty-seventh Congress, at an estimated  
16 cost of \$205,000;

17 Searsport Harbor, Maine: House Document Numbered  
18 500, Eighty-seventh Congress, at an estimated cost of  
19 \$700,000;

20 Portland Harbor, Maine: House Document Numbered  
21 216, Eighty-seventh Congress, at an estimated cost of  
22 \$8,340,000;

23 Kennebunk River, Maine: House Document Numbered  
24 459, Eighty-seventh Congress, at an estimated cost of  
25 \$270,000;



1        Portsmouth Harbor and Piscataqua River, Maine and  
2 New Hampshire: House Document Numbered 482, Eighty-  
3 seventh Congress, at an estimated cost of \$7,500,000;

4        Gloucester Harbor, Massachusetts: House Document  
5 Numbered 341, Eighty-seventh Congress, at an estimated  
6 cost of \$1,100,000;

7        Marblehead Harbor, Massachusetts: House Document  
8 Numbered 516, Eighty-seventh Congress, at an estimated  
9 cost of \$1,752,000;

10       Chelsea Harbor, Massachusetts: House Document Num-  
11 bered 350, Eighty-seventh Congress, at an estimated cost  
12 of \$2,843,000;

13       Dorchester Bay and Neponset River, Massachusetts:  
14 Senate Document Numbered 126, Eighty-seventh Congress,  
15 at an estimated cost of \$7,050,000;

16       Plymouth Harbor, Massachusetts: Senate Document  
17 Numbered 124, Eighty-seventh Congress, at an estimated  
18 cost of \$1,200,000;

19       Pawtuxet Cove, Rhode Island: House Document Num-  
20 bered 236, Eighty-seventh Congress, at an estimated cost  
21 of \$210,000;

22       Great Lakes to Hudson River Waterway, New York:  
23 River and Harbor Committee Document Numbered 20,  
24 Seventy-third Congress, for the further partial accomplish-  
25 ment of the approved plan there is hereby authorized to be

1 appropriated, in addition to sums previously authorized,  
2 \$1,000,000;

3 Little Neck Bay, New York: House Document Num-  
4 bered 510, Eighty-seventh Congress, at an estimated cost  
5 of \$2,185,000;

6 Flushing Bay and Creek, New York: House Docu-  
7 ment Numbered 551, Eighty-seventh Congress, at an esti-  
8 mated cost of \$1,695,000;

9 Buttermilk Channel, New York: House Document  
10 Numbered 483, Eighty-seventh Congress, at an estimated  
11 cost of \$2,226,000;

12 Raritan River, New Jersey: House Document Num-  
13 bered 455, Eighty-sixth Congress, maintenance;

14 Lynnhaven Inlet, Bay, and connecting waters, Vir-  
15 ginia: House Document Numbered 580, Eighty-seventh Con-  
16 gress, at an estimated cost of \$1,068,000: *Provided*, That  
17 nothing in this Act shall be construed as authorizing re-  
18 imbursement to local interests for the Long Creek-Broad  
19 Bay Canal Bridge;

20 James River, Virginia: House Document Numbered  
21 586, Eighty-seventh Congress, at an estimated cost of  
22 \$39,000,000: *Provided*, That this authorization shall expire  
23 after a period of five years from the date of approval of this  
24 Act unless the Governor of Virginia has endorsed the project  
25 within that time: *And provided further*, That prior to con-

1   struction, there will be submitted to the Congress a feasibility  
2   report which takes account of possible adverse effects of the  
3   project on seed oyster production;

4       Rollinson Channel and channel from Hatteras Inlet to  
5   Hatteras, North Carolina: House Document Numbered 457,  
6   Eighty-seventh Congress, at an estimated cost of \$652,000;

7       Wilmington Harbor, North Carolina: Senate Docu-  
8   ment Numbered 114, Eighty-seventh Congress, at an esti-  
9   mated cost of \$6,370,000;

10       Savannah Harbor, Georgia: Senate Document Num-  
11   bered 115, Eighty-seventh Congress, at an estimated cost of  
12   \$605,000;

13       Canaveral Harbor, Florida: Senate Document Numbered  
14   140, Eighty-seventh Congress, at the estimated cost of  
15   \$5,076,000;

16       Key West Harbor, Florida: Senate Document Num-  
17   bered 106, Eighty-seventh Congress, at an estimated cost  
18   of \$820,000;

19       Tampa Harbor, Port Sutton and Ybor Channels, Florida:  
20   House Document Numbered 529, Eighty-seventh Congress,  
21   at an estimated cost of \$997,000;

22       Walter F. George lock and dam, Alabama: Senate Docu-  
23   ment Numbered 109, Eighty-seventh Congress, at an esti-  
24   mated cost of \$500,000;

25       Pensacola Harbor, Florida: House Document Numbered



1 528, Eighty-seventh Congress, at an estimated cost of  
2 \$424,000;

3 Pascagoula Harbor, Mississippi: House Document Num-  
4 bered 560, Eighty-seventh Congress, at an estimated cost of  
5 \$4,870,000;

6 Mississippi River, Baton Rouge to Gulf of Mexico,  
7 Louisiana: Senate Document Numbered 36, Eighty-seventh  
8 Congress, at an estimated cost of \$357,000;

9 The project, Mississippi River, Baton Rouge to the Gulf  
10 of Mexico, barge channel through Devils Swamp, Louisiana  
11 (Baton Rouge Harbor), authorized by the River and Harbor  
12 Act of 1946, in accordance with the recommendations of the  
13 Chief of Engineers in House Document Numbered 321,  
14 Eightieth Congress, as amended by the Flood Control Act  
15 of 1948, is hereby further amended to provide for the pro-  
16 vision as required, of suitable dikes and other retaining  
17 structures at a Federal cost of \$299,500, for the construction  
18 and future maintenance of the project, in order to provide  
19 additional industrial sites with water frontage which are now  
20 needed to permit the normal development and expansion of  
21 the industrial and commercial activities of the locality:  
22 *Provided*, That local interests contribute the sum of \$100,500  
23 toward the cost of the work.

24 Bayous Terrebonne, Petit Caillou, Grand Caillou, Du

1 Large, and connecting channels, Louisiana, and Atchafalaya  
2 River, Morgan City to Gulf of Mexico: House Document  
3 Numbered 583, Eighty-seventh Congress, at an estimated  
4 cost of \$45,000;

5 Gulf Intracoastal Waterway, Louisiana and Texas:  
6 House Document Numbered 556, Eighty-seventh Congress,  
7 at an estimated cost of \$25,540,000: *Provided*, That the  
8 authority to make such modifications as in the discretion of  
9 the Chief of Engineers may be advisable, as set forth in  
10 House Document Numbered 556, Eighty-seventh Congress,  
11 shall be interpreted to apply to, but not limited to, the im-  
12 provement of the existing channels at proposed channel re-  
13 location sites in lieu of such relocations.

14 Calcasieu River salt water barrier, Louisiana: House  
15 Document Numbered 582, Eighty-seventh Congress, at an  
16 estimated cost of \$3,310,000: *Provided*, That the Corps of  
17 Engineers is directed to study the question of cost sharing  
18 taking into account that measures for mitigation of dam-  
19 ages from navigation improvements will be a Federal re-  
20 sponsibility and enhancement effects will be shared on the  
21 basis of a 50 per centum Federal and 50 per centum non-  
22 Federal; such cost sharing is hereby authorized as deter-  
23 mined to be feasible and justified by the Chief of Engineers  
24 and Secretary of the Army within the first period of sixty

1 calendar days of continuous session of the Congress after  
2 the date on which the report is submitted to it unless such  
3 report is disapproved by the Congress.

4 Mississippi River at Clarksville, Missouri: House Docu-  
5 ment Numbered 552, Eighty-seventh Congress, at an esti-  
6 mated cost of \$103,300;

7 Sandy Slough, Lincoln County, Missouri: House Docu-  
8 ment Numbered 419, Eighty-seventh Congress, at an esti-  
9 mated cost of \$195,000;

10 Sabine-Neches Waterway, Texas: House Document  
11 Numbered 553, Eighty-seventh Congress, at an estimated  
12 cost of \$20,830,000;

13 Trinity River, Wallisville Reservoir, Texas; House Docu-  
14 ment Numbered 215, Eighty-seventh Congress, at an esti-  
15 mated cost of \$9,162,000: *Provided*, That nothing in this  
16 Act shall be construed as authorizing the acquisition of ad-  
17 ditional lands for establishment of a national wildlife refuge  
18 at the reservoir.

19 Gulf Intracoastal Waterway, channel to Palacios,  
20 Texas: House Document Numbered 504, Eighty-seventh  
21 Congress, at an estimated cost of \$818,000;

22 Gulf Intracoastal Waterway, channel to Victoria,  
23 Texas: House Document Numbered 288, Eighty-seventh  
24 Congress, at an estimated cost of \$1,590,000;

25 Illinois Waterway, Illinois and Indiana: House Docu-



1 ment Numbered 31, Eighty-sixth Congress, is approved  
2 and there is hereby authorized the sum of \$40,000,000 for  
3 initiation and partial accomplishment of the project.

4 Kaskaskia River, Illinois: Senate Document Numbered  
5 44, Eighty-seventh Congress, at an estimated cost of \$58,-  
6 200,000;

7 Mississippi River between Missouri River and Minne-  
8 apolis, Minnesota: House Document Numbered 513, Eighty-  
9 seventh Congress, at an estimated cost of \$1,205,000;

10 Ontonagon Harbor, Michigan: House Document Num-  
11 bered 287, Eighty-seventh Congress, at an estimated cost of  
12 \$4,741,000;

13 Muskegon Harbor, Michigan: House Document Num-  
14 bered 474, Eighty-seventh Congress, at an estimated cost of  
15 \$609,000;

16 Leland Harbor, Michigan: House Document Numbered  
17 413, Eighty-seventh Congress, at an estimated cost of  
18 \$485,000;

19 Little Bay De Noc, Gladstone Harbor and Kipling,  
20 Michigan: House Document Numbered 480, Eighty-seventh  
21 Congress, at an estimated cost of \$350,000;

22 Green Bay Harbor, Wisconsin: House Document Num-  
23 bered 470, Eighty-seventh Congress, at an estimated cost of  
24 \$4,270,000;

1 Kenosha Harbor, Wisconsin: House Document Num-  
2 bered 496, Eighty-seventh Congress, at an estimated cost  
3 of \$673,000;

4 Manitowoc Harbor, Wisconsin: House Document Num-  
5 bered 479, Eighty-seventh Congress, at an estimated cost  
6 of \$719,000;

7 Milwaukee Harbor, Wisconsin: House Document Num-  
8 bered 134, Eighty-seventh Congress, at an estimated cost  
9 of \$4,029,000;

10 Chicago Harbor, Illinois: House Document Numbered  
11 485, Eighty-seventh Congress, at an estimated cost of  
12 \$1,505,000;

13 Calumet Harbor and River, Illinois and Indiana:  
14 House Document Numbered 581, Eighty-seventh Congress,  
15 at an estimated cost of \$11,464,000;

16 New Buffalo Harbor, Michigan: House Document Num-  
17 bered 481, Eighty-seventh Congress, at an estimated cost  
18 of \$667,000;

19 Caseville Harbor, Michigan: House Document Num-  
20 bered 64, Eighty-seventh Congress, at an estimated cost  
21 of \$327,000;

22 Saginaw River, Michigan: House Document Numbered  
23 544, Eighty-seventh Congress, at an estimated cost of  
24 \$4,780,000;

25 Rouge River, Michigan: House Document Numbered

1 509, Eighty-seventh Congress, at an estimated cost of  
2 \$257,000;

3 Huron Harbor, Ohio: House Document Numbered 165,  
4 Eighty-seventh Congress, at an estimated cost of \$8,557,000;

5 Cleveland Harbor, Ohio: House Document Numbered  
6 527, Eighty-seventh Congress, at an estimated cost of  
7 \$888,000;

8 Conneaut Harbor, Ohio: House Document Numbered  
9 415, Eighty-seventh Congress, at an estimated cost of  
10 \$6,179,000;

11 Erie Harbor, Pennsylvania: House Document Num-  
12 bered 340, Eighty-seventh Congress, at an estimated cost  
13 of \$671,000;

14 Buffalo Harbor, New York: House Document Num-  
15 bered 451, Eighty-seventh Congress, at an estimated cost  
16 of \$2,797,000;

17 Great Sodus Bay Harbor, New York: House Document  
18 Numbered 138, Eighty-seventh Congress, at an estimated  
19 cost of \$765,000;

20 Oswego Harbor, New York: House Document Num-  
21 bered 471, Eighty-seventh Congress, at an estimated cost of  
22 \$1,180,000;

23 Dana Point Harbor, California: House Document Num-  
24 bered 532, Eighty-seventh Congress, at an estimated cost of  
25 \$3,730,000;



1 Santa Barbara Harbor, California: House Document  
2 Numbered 518, Eighty-seventh Congress, at an estimated  
3 cost of \$3,000,000;

4 Oakland Harbor, California, Fruitvale Avenue Bridge:  
5 Senate Document Numbered 75, Eighty-seventh Congress,  
6 at an estimated cost of \$1,750,000;

7 Oakland Harbor, California: House Document Num-  
8 bered 353, Eighty-seventh Congress, at an estimated cost  
9 of \$6,775,000;

10 Noyo River and Harbor, California: Senate Document  
11 Numbered 121, Eighty-seventh Congress, at an estimated  
12 cost of \$13,231,000;

13 Columbia and Lower Willamette Rivers, Oregon and  
14 Washington: House Document Numbered 203, Eighty-  
15 seventh Congress, at an estimated cost of \$493,000;

16 Columbia and Lower Willamette Rivers below Van-  
17 couver, Washington, and Portland, Oregon: House Docu-  
18 ment Numbered 452, Eighty-seventh Congress, at an esti-  
19 mated cost of \$20,100,000;

20 Tacoma Harbor, Port Industrial and Hylebos Water-  
21 ways, Washington: Senate Document Numbered 104,  
22 Eighty-seventh Congress, at an estimated cost of \$2,460,000;

23 Kingston Harbor, Washington: House Document Num-  
24 bered 417, Eighty-seventh Congress, at an estimated cost of  
25 \$428,000;

1 Swinomish Channel, Washington: House Document  
 2 Numbered 499, Eighty-seventh Congress, at an estimated  
 3 cost of \$887,000;

4 Kaunakakai Harbor, Molokai, Hawaii: House Docu-  
 5 ment Numbered 484, Eighty-seventh Congress, at an esti-  
 6 mated cost of \$7,919,000;

7 BEACH EROSION

8 State of New Hampshire: House Document Numbered  
 9 416, Eighty-seventh Congress, at an estimated cost of  
 10 \$88,000;

11 Clark Point, New Bedford, Massachusetts: House Docu-  
 12 ment Numbered 584, Eighty-seventh Congress, at an esti-  
 13 mated cost of \$60,000;

14 Virginia Beach, Virginia: House Document Numbered  
 15 382, Eighty-seventh Congress, periodic nourishment;

16 Fort Macon, Atlantic Beach and vicinity, North Caro-  
 17 lina: House Document Numbered 555, Eighty-seventh Con-  
 18 gress, at an estimated cost of \$194,000;

19 Palm Beach County from Martin County line to Lake  
 20 Worth Inlet and from South Lake Worth Inlet to Broward  
 21 County line, Florida: House Document Numbered 164,  
 22 Eighty-seventh Congress, at an estimated cost of \$128,800;

23 Virginia Key and Key Biscayne, Florida: House Docu-  
 24 ment Numbered 561, Eighty-seventh Congress, at an esti-  
 25 mated cost of \$220,000;

1 San Juan and vicinity, Puerto Rico: House Document  
2 Numbered 575, Eighty-seventh Congress, at an estimated  
3 cost of \$65,400;

4 Lake Erie shoreline from the Michigan-Ohio State line  
5 to Marblehead, Ohio: House Document Numbered 63,  
6 Eighty-seventh Congress, at an estimated cost of \$658,500;

7 Sheffield Lake community park, Sheffield Lake Village,  
8 Ohio: House Document Numbered 414, Eighty-seventh Con-  
9 gress, at an estimated cost of \$100,300;

10 Ventura-Pierpont area, California: House Document  
11 Numbered 458, Eighty-seventh Congress, at an estimated  
12 cost of \$515,000.

13 Orange County, California, House Document Numbered  
14 —, Eighty-seventh Congress, at an estimated cost of  
15 \$2,845,000.

16 SEC. 102. That the Secretary of the Army is hereby  
17 authorized to reimburse local interests for such work done  
18 by them on the beach erosion projects authorized in section  
19 101, and in other sections of this Act, subsequent to the  
20 initiation of the cooperative studies which form the basis for  
21 the projects: *Provided*, That the work which may have been  
22 done on these projects is approved by the Chief of Engi-  
23 neers as being in accordance with the projects herein  
24 adopted: *Provided further*, That such reimbursement shall  
25 be subject to appropriations applicable thereto or funds avail-



1 able therefor and shall not take precedence over other  
2 pending projects of higher priority for improvements.

3 SEC. 103. (a) The Act approved August 13, 1946, as  
4 amended by the Act approved July 28, 1956 (33 U.S.C.  
5 426e-h), pertaining to shore protection, is hereby further  
6 amended as follows:

7 (1) the word "one-third" in section 1(b) is de-  
8 leted and the word "one-half" is substituted therefor;

9 (2) the following is added after the word "located"  
10 in section 1(b): ", except that the costs allocated to the  
11 restoration and protection of Federal property shall be  
12 borne fully by the Federal Government, and, further,  
13 that Federal participation in the cost of a project for  
14 restoration and protection of State, county, and other  
15 publicly owned shore parks and conservation areas may  
16 be, in the discretion of the Chief of Engineers, not more  
17 than 70 per centum of the total cost exclusive of land  
18 costs, when such areas: Include a zone which excludes  
19 permanent human habitation; include but are not limited  
20 to recreational beaches; satisfy adequate criteria for  
21 conservation and development of the natural resources  
22 of the environment; extend landward a sufficient distance  
23 to include, where appropriate, protective dunes, bluffs,  
24 or other natural features which serve to protect the  
25 uplands from damage; and provide essentially full park

1 facilities for appropriate public use, all of which shall  
2 meet with the approval of the Chief of Engineers”;

3 (3) the following is added after the word “sup-  
4 plemented” in section 1 (e) : “, or, in the case of a  
5 small project under section 3 of this Act, unless the plan  
6 therefor has been approved by the Chief of Engineers”;  
7 and

8 (4) sections 2 and 3 are amended to read as  
9 follows:

10 “SEC. 2. The Secretary of the Army is hereby author-  
11 ized to reimburse local interests for work done by them,  
12 after initiation of the survey studies which form the basis  
13 for the project, on authorized projects which individually  
14 do not exceed \$1,000,000 in total cost: *Provided*, That the  
15 work which may have been done on the projects is ap-  
16 proved by the Chief of Engineers as being in accordance  
17 with the authorized projects: *Provided further*, That such  
18 reimbursement shall be subject to appropriations applicable  
19 thereto or funds available therefor and shall not take prece-  
20 dence over other pending projects of higher priority for  
21 improvements.

22 “SEC. 3. The Secretary of the Army is hereby author-  
23 ized to undertake construction of small shore and beach  
24 restoration and protection projects not specifically author-  
25 ized by Congress, which otherwise comply with section 1

1 of this Act, when he finds that such work is advisable, and  
2 he is further authorized to allot from any appropriations  
3 heretofore or hereafter made for civil works, not to exceed  
4 \$3,000,000 for any one fiscal year for the Federal share of  
5 the costs of construction of such projects: *Provided*, That  
6 not more than \$400,000 shall be allotted for this purpose  
7 for any single project and the total amount allotted shall  
8 be sufficient to complete the Federal participation in the  
9 project under this section including periodic nourishment  
10 as provided for under section 1 (c) of this Act: *Provided*  
11 *further*, That the provisions of local cooperation specified  
12 in section 1 of this Act shall apply: *And provided further*,  
13 That the work shall be complete in itself and shall not com-  
14 mit the United States to any additional improvement to  
15 insure its successful operation, except for participation in  
16 periodic beach nourishment in accordance with section 1 (c)  
17 of this Act, and as may result from the normal procedure  
18 applying to projects authorized after submission of survey  
19 reports.”

20 (b) All provisions of existing law relating to surveys  
21 of rivers and harbors shall apply to surveys relating to shore  
22 protection and any expenses incident and necessary to in-  
23 vestigation and study shall be paid from funds for general in-  
24 vestigations, civil functions, Department of the Army, and



1 section 2 of the River and Harbor Act approved July 3,  
2 1930, as amended (33 U.S.C. 426), is modified to the ex-  
3 tent inconsistent herewith.

4 (c) The cost-sharing provisions of this Act shall apply  
5 in determining the amounts of Federal participation in or  
6 payments toward the costs of authorized projects which  
7 have not been substantially completed prior to the date  
8 of approval of this Act, and the Chief of Engineers, through  
9 the Beach Erosion Board, is authorized and directed to re-  
10 compute the amounts of Federal contribution toward the  
11 costs of such projects accordingly.

12 SEC. 104. The project for aquatic plant control author-  
13 ized by the River and Harbor Act of 1958 (72 Stat. 297,  
14 300) is hereby modified to provide that research costs and  
15 planning costs prior to construction shall be borne fully  
16 by the United States and shall not be included in the cost  
17 to be shared by local interests.

18 SEC. 105. Section 110(f) of the River and Harbor  
19 Act of 1958 (72 Stat. 297) is amended by changing the  
20 period to a comma and adding the following: "and upon  
21 completion of transfer to the said State of all right, title,  
22 and interest of the United States in and to the canal in  
23 accordance with the agreement executed December 14,  
24 1960, between the Chief of Engineers and the representatives

1 of said State, the additional sum of \$800,000 is hereby  
2 authorized to be appropriated to be expended by the Corps  
3 of Engineers, or by said State, for the repair and modifica-  
4 tion of any canal properties and appurtenances, notwith-  
5 standing the provisions of section 110 (b) hereof.”

6 SEC. 106. The Secretary of the Army is authorized and  
7 directed to prepare and transmit to Congress, at the earliest  
8 practicable date, a compilation of survey and review reports  
9 on river and harbor and flood control improvements, similar  
10 to that prepared in accordance with the Act of March 4,  
11 1913, revised in accordance with the Acts of July 3, 1930,  
12 August 30, 1935, and May 17, 1950, and printed in House  
13 Document Numbered 214, Eighty-second Congress, first  
14 session.

15 SEC. 107. The Chief of Engineers is authorized to per-  
16 form such work as may be necessary to provide for the repair  
17 and restoration of lock and dam numbered 3 on the Big  
18 Sandy River: *Provided*, That the work authorized herein  
19 shall have no effect on the condition that local interests shall  
20 operate and maintain the structure and related properties as  
21 required by the Act of Congress approved August 6, 1956  
22 (70 Stat. 1062) : *And provided further*, That there is hereby  
23 authorized to be expended from appropriations heretofore  
24 or hereafter made for civil functions administered by the

1 Department of Army, such funds as may be necessary for  
2 the repair and restoration of lock and dam numbered 3 on  
3 the Big Sandy River, not to exceed \$200,000.

4 SEC. 108. The Secretary of the Army is hereby author-  
5 ized and directed to cause surveys to be made at the following  
6 named localities and subject to all applicable provisions of  
7 section 110 of the River and Harbor Act of 1950:

8 Falmouth Harbor, Maine.

9 Channel between Point Shirley and Deer Island,  
10 Massachusetts.

11 Little Egg Inlet, New Jersey.

12 Brigantine Inlet, New Jersey.

13 Corsons Inlet, New Jersey.

14 Kings Bay Deepwater Channel, Georgia.

15 Auglaize River at Wapakoneta, Ohio.

16 Surveys of the coastal areas of the United States and  
17 its possessions, including the shores of the Great Lakes,  
18 in the interest of beach erosion control, hurricane protection  
19 and related purposes: *Provided*, That surveys of particular  
20 areas shall be authorized by appropriate resolutions of either  
21 the Committee on Public Works of the United States Senate  
22 or the Committee on Public Works of the House of Repre-  
23 sentatives.

24 SEC. 109. Title I of this Act may be cited as the  
25 "River and Harbor Act of 1962".



## TITLE II—FLOOD CONTROL

SEC. 201. Section 3 of the Act approved June 22, 1936 (Public Law Numbered 738, Seventy-fourth Congress), as amended by section 2 of the Act approved June 28, 1938 (Public Law Numbered 761, Seventy-fifth Congress), shall apply to all works authorized in this title except that for any channel improvement or channel rectification project, provisions (a), (b), and (c) of section 3 of said Act of June 22, 1936, shall apply thereto, and except as otherwise provided by law: *Provided*, That the authorization for any flood control project herein adopted requiring local cooperation shall expire five years from the date on which local interests are notified in writing by the Department of the Army of the requirements of local cooperation, unless said interests shall within said time furnish assurances satisfactory to the Secretary of the Army that the required cooperation will be furnished.

SEC. 202. The provisions of section 1 of the Act of December 22, 1944 (Public Law Numbered 534, Seventy-eighth Congress, second session), shall govern with respect to projects authorized in this Act, and the procedures therein set forth with respect to plans, proposals, or reports for works of improvement for navigation or flood control and for irrigation and purposes incidental thereto shall apply as if herein set forth in full.

1        SEC. 203. The following works of improvement for the  
2 benefit of navigation and the control of destructive flood-  
3 waters and other purposes are hereby adopted and authorized  
4 to be prosecuted under the direction of the Secretary of the  
5 Army and the supervision of the Chief of Engineers in ac-  
6 cordance with the plans in the respective reports hereinafter  
7 designated and subject to the conditions set forth therein:  
8 *Provided*, That the necessary plans, specifications, and pre-  
9 liminary work may be prosecuted on any project authorized  
10 in this title with funds from appropriations heretofore or  
11 hereafter made for flood control so as to be ready for rapid  
12 inauguration of a construction program: *Provided further*,  
13 That the projects authorized herein shall be initiated as ex-  
14 peditiously and prosecuted as vigorously as may be consistent  
15 with budgetary requirements: *And provided further*, That  
16 penstocks and other similar facilities adapted to possible  
17 future use in the development of hydroelectric power shall be  
18 installed in any dam authorized in this Act for construction  
19 by the Department of the Army when approved by the  
20 Secretary of the Army on the recommendation of the Chief  
21 of Engineers and the Federal Power Commission.

22                    NEW ENGLAND-ATLANTIC COASTAL AREA

23        The project for hurricane-flood protection at Wareham-  
24 Marion, Massachusetts, is hereby authorized substantially in  
25 accordance with the recommendations of the Chief of Engi-

1 neers in House Document Numbered 548, Eighty-seventh  
2 Congress, at an estimated cost of \$3,811,500.

3 The project for navigation and hurricane-flood protec-  
4 tion at Point Judith, Rhode Island, is hereby authorized  
5 substantially in accordance with the recommendations of the  
6 Chief of Engineers in House Document Numbered 521,  
7 Eighty-seventh Congress, at an estimated cost of \$2,414,000.

8 The project for navigation and hurricane-flood control  
9 protection at Narragansett Pier, Rhode Island, is hereby  
10 authorized substantially in accordance with the recommenda-  
11 tions of the Chief of Engineers in House Document Num-  
12 bered 195, Eighty-seventh Congress, at an estimated cost  
13 of \$1,152,000.

14 LONG ISLAND SOUND AREA

15 The project for hurricane-flood control protection at  
16 New London, Connecticut, is hereby authorized substantially  
17 in accordance with the recommendations of the Chief of  
18 Engineers in House Document Numbered 478, Eighty-  
19 seventh Congress, at an estimated cost of \$2,401,000.

20 The project for hurricane-flood protection at Westport,  
21 Connecticut, is hereby authorized substantially in accordance  
22 with the recommendations of the Chief of Engineers in  
23 House Document Numbered 412, Eighty-seventh Congress,  
24 at an estimated cost of \$217,000.

25 The project for hurricane-flood protection at Mystic,



1 Connecticut, is hereby authorized substantially in accord-  
2 ance with the recommendations of the Chief of Engineers  
3 in House Document Numbered 411, Eighty-seventh Con-  
4 gress, at an estimated cost of \$1,490,000.

5 HOUSATONIC RIVER BASIN

6 The project for flood protection on the Naugatuck River  
7 at Ansonia-Derby, Connecticut, is hereby authorized sub-  
8 stantially in accordance with the recommendations of the  
9 Chief of Engineers in House Document Numbered 437,  
10 Eighty-seventh Congress, at an estimated cost of \$5,620,000.

11 HUDSON RIVER BASIN

12 The project for flood protection on Rondout Creek and  
13 Wallkill River and their tributaries, New York and New  
14 Jersey, is hereby authorized substantially in accordance with  
15 the recommendations of the Chief of Engineers in Senate  
16 Document Numbered 113, Eighty-seventh Congress, at an  
17 estimated cost of \$5,111,000.

18 NEW JERSEY-ATLANTIC COASTAL AREA

19 The project for hurricane-flood protection and beach  
20 erosion control on Raritan Bay and Sandy Hook Bay, New  
21 Jersey, is hereby authorized substantially in accordance  
22 with the recommendations of the Chief of Engineers in  
23 House Document Numbered 464, Eighty-seventh Congress,  
24 at an estimated cost of \$3,097,000.

## SUSQUEHANNA RIVER BASIN

In addition to previous authorizations, there is hereby authorized to be appropriated the sum of \$5,000,000 for the prosecution of the comprehensive plan of development for the West Branch of the Susquehanna River Basin, approved in the Act of September 3, 1954.

The project for construction of the Fall Brook and Ayleworth Creek Reservoirs, and local flood protection works on the Lackawanna River at Scranton, Pennsylvania, is hereby authorized substantially as recommended by the Chief of Engineers, in Senate Document Numbered 141, Eighty-seventh Congress, at an estimated cost of \$3,596,000.

The project for the Juniata River and tributaries, Pennsylvania, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 565, Eighty-seventh Congress, at an estimated cost of \$32,150,000: *Provided*, That installation of the power generating facilities shall not be made until the Chief of Engineers shall submit a reexamination report to the Congress for authorization.

## 1 DELAWARE RIVER BASIN

2 The project for the comprehensive development of the  
3 Delaware River Basin, New York, New Jersey, Pennsyl-  
4 vania, and Delaware, is hereby authorized substantially in  
5 accordance with the recommendations of the Chief of Engi-  
6 neers, in House Document Numbered 522, Eighty-seventh  
7 Congress, at an estimated cost of \$192,400,000.

## 8 POTOMAC RIVER BASIN

9 The project for the North Branch of the Potomac River,  
10 Maryland and West Virginia, is hereby authorized substan-  
11 tially in accordance with the recommendations of the Chief  
12 of Engineers, in House Document Numbered 469, Eighty-  
13 seventh Congress, at an estimated cost of \$50,965,000.

## 14 MIDDLE ATLANTIC COASTAL AREA

15 The project for hurricane-flood protection at Norfolk,  
16 Virginia, is hereby authorized substantially in accordance  
17 with the recommendations of the Chief of Engineers in House  
18 Document Numbered 354, Eighty-seventh Congress, at an  
19 estimated cost of \$1,537,000.

20 The project for hurricane-flood protection and beach ero-  
21 sion control at Wrightsville Beach, North Carolina, is hereby  
22 authorized substantially in accordance with the recommenda-  
23 tions of the Chief of Engineers in House Document Num-  
24 bered 511, Eighty-seventh Congress, at an estimated cost  
25 of \$345,000.



1       The project for hurricane-flood protection and beach  
2 erosion control at Carolina Beach and vicinity, North Caro-  
3 lina, is hereby authorized substantially in accordance with the  
4 recommendations of the Chief of Engineers in House Docu-  
5 ment Numbered 418, Eighty-seventh Congress, at an esti-  
6 mated cost of \$739,000.

7                   CAPE FEAR RIVER BASIN

8       The project for the comprehensive development of the  
9 Cape Fear River Basin, North Carolina, is hereby authorized  
10 substantially in accordance with the recommendations of the  
11 Chief of Engineers in House Document Numbered 508,  
12 Eighty-seventh Congress, at an estimated cost of  
13 \$25,143,000.

14                   APALACHICOLA RIVER BASIN, GEORGIA

15       The project for the West Point Reservoir, Chattahoochee  
16 River, Georgia, is hereby authorized substantially in accord-  
17 ance with the recommendations of the Chief of Engineers  
18 in House Document Numbered 570, Eighty-seventh Con-  
19 gress, at an estimated cost of \$52,900,000.

20       The project for the comprehensive development of the  
21 Flint River, Georgia, is hereby authorized substantially in  
22 accordance with the recommendations of the Chief of Engi-  
23 neers in House Document Numbered 567, Eighty-seventh  
24 Congress, at an estimated cost of \$151,820,000: *Provided*,  
25 That this authorization is without prejudice to consideration

1 by the Federal Power Commission of non-Federal develop-  
2 ment of power, in conjunction with the Federal project for  
3 Flint River, for which application for license may be received  
4 and which may be found to be consistent with the optimum  
5 development of resources and in the public interest.

6 CENTRAL AND SOUTHERN FLORIDA

7 In addition to previous authorizations, there is hereby  
8 authorized to be appropriated the sum of \$30,000,000 for  
9 the prosecution of the comprehensive plan for flood control  
10 and other purposes in central and southern Florida approved  
11 in the Act of June 30, 1948, and subsequent Acts of Con-  
12 gress, and such comprehensive plan is hereby modified to  
13 include the following items:

14 The project for flood protection of West Palm Beach  
15 Canal is hereby authorized substantially as recommended by  
16 the Secretary of the Army and the Chief of Engineers in  
17 Senate Document Numbered 146, Eighty-seventh Congress,  
18 at an estimated cost of \$3,220,000.

19 The project for flood protection on Boggy Creek, Florida,  
20 is hereby authorized substantially as recommended by the  
21 Chief of Engineers in Senate Document Numbered 125,  
22 Eighty-seventh Congress, at an estimated cost of \$1,176,000.

23 The project for South Dade County, Florida, is hereby  
24 authorized substantially in accordance with the recommenda-  
25 tions of the Secretary of the Army and the Chief of Engineers

1 in Senate Document Numbered 138, Eighty-seventh Con-  
2 gress, at an estimated cost of \$13,388,000.

3 The project for Shingle Creek, Florida, between Clear  
4 Lake and Lake Tohopekaliga, for flood control and major  
5 drainage is hereby authorized substantially as recommended  
6 by the Chief of Engineers in Senate Document No. 139,  
7 Eighty-seventh Congress, at an estimated cost of \$3,250,000:  
8 *Provided*, That no obligation shall be incurred for develop-  
9 ment of the Reedy Creek Swamp as a wildlife management  
10 area unless the State or one or more other non-Federal  
11 entities shall have entered into an agreement in advance to  
12 assume at least 50 per centum of the cost associated with that  
13 feature of the project.

14 The project for flood protection in the Cutler drain area,  
15 Florida, is hereby authorized substantially in accordance with  
16 the recommendations of the Chief of Engineers in Senate  
17 Document Numbered 123, Eighty-seventh Congress, at an  
18 estimated cost of \$2,063,000: *Provided*, That local interests  
19 shall receive credit in the Contributed Fund Account of the  
20 project for moneys shown to have been spent after March 1,  
21 1960 (preferably December 22, 1959), for construction of  
22 units of the authorized plan for Cutler Drain: *Provided*  
23 *further*, That such completed work must be inspected and  
24 accepted by the Chief of Engineers as constituting useful  
25 parts of the authorized plan: *And provided further*, That the



1 credit established shall be in accordance with cost sharing  
2 arrangements for the central and southern Florida flood  
3 control project in an amount not to exceed \$124,000.

4 GREEN SWAMP REGION, FLORIDA

5 The project for the four river basins, Florida, namely  
6 the Hillsborough, Oklawaha, Withlacoochee, and Peace  
7 Rivers, is hereby authorized substantially in accordance with  
8 the recommendations of the Chief of Engineers in House  
9 Document Numbered 585, Eighty-seventh Congress, at an  
10 estimated cost of \$57,760,000: *Provided*, That the cost  
11 sharing shall be as recommended by the Secretary of the  
12 Army in House document numbered 585, Eighty-seventh  
13 Congress: *And provided further*, That planning and con-  
14 struction on the Lowery-Mattie Conservation Area and its  
15 appurtenant works is deferred until additional studies are  
16 made thereon, and a further report submitted to the Congress.

17 PASCAGOULA RIVER BASIN

18 The project for flood protection on the Chunky Creek,  
19 Chickasawhay and Pascagoula Rivers, Mississippi, is hereby  
20 authorized substantially in accordance with the recommenda-  
21 tions of the Chief of Engineers in House Document Num-  
22 bered 549, Eighty-seventh Congress, at an estimated cost of  
23 \$6,740,000.

## 1                    LOWER MISSISSIPPI RIVER BASIN

2            The project for flood control and improvement of the  
3 lower Mississippi River adopted by the Act approved May  
4 15, 1928, as amended by subsequent Acts, is hereby modi-  
5 fied and expanded to include the following item:

6            (a) Monetary authorizations heretofore and hereafter  
7 made available to the project or any portion thereof shall  
8 be combined into a single sum and be available for applica-  
9 tion to any portion of the project.

10           The project for hurricane-flood protection on the Missis-  
11 sippi River Delta at and below New Orleans, Louisiana, is  
12 hereby authorized substantially in accordance with the recom-  
13 mendations of the Chief of Engineers in House Document  
14 Numbered 550, Eighty-seventh Congress, at an estimated  
15 cost of \$7,502,000.

16           The project for flood protection on Red River in Natchi-  
17 toches and Red River Parishes, Louisiana, is hereby author-  
18 ized substantially in accordance with the recommendations of  
19 the Chief of Engineers in House Document Numbered 476,  
20 Eighty-seventh Congress, at an estimated cost of \$1,293,000.

## 21                    BUFFALO BAYOU

22           The project for flood protection on Vince and Little  
23 Vince Bayous, Texas, is hereby authorized substantially as

1 recommended by the Chief of Engineers in House Docu-  
2 ment Numbered 441, Eighty-seventh Congress, at an esti-  
3 mated cost of \$2,224,000.

4 GULF OF MEXICO

5 The project for hurricane-flood protection at Port Arthur  
6 and vicinity, Texas, is hereby authorized substantially in  
7 accordance with the recommendations of the Chief of Engi-  
8 neers in House Document Numbered 505, Eighty-seventh  
9 Congress, at an estimated cost of \$23,380,000.

10 The project for hurricane-flood protection at Freeport  
11 and vicinity, Texas, is hereby authorized substantially in  
12 accordance with the recommendations of the Chief of Engi-  
13 neers in House Document Numbered 495, Eighty-seventh  
14 Congress, at an estimated cost of \$3,780,000.

15 TRINITY RIVER BASIN

16 The project for flood protection on the East Fork of  
17 the Trinity River, Texas, is hereby authorized substantially  
18 in accordance with the recommendations of the Chief of  
19 Engineers in House Document Numbered 554, Eighty-  
20 seventh Congress, at an estimated cost of \$23,760,000.

21 The project for extension of the Fort Worth Floodway,  
22 Texas, is hereby authorized substantially as recommended by  
23 the Chief of Engineers in House Document Numbered 454,  
24 Eighty-seventh Congress, at an estimated cost of \$5,148,000.



## BRAZOS RIVER BASIN

1  
2 In addition to previous authorizations, there is hereby  
3 authorized to be appropriated the sum of \$21,000,000 for  
4 the prosecution of the comprehensive plan of development  
5 for the Brazos River Basin, authorized by the Act of Sep-  
6 tember 3, 1954, as amended by subsequent Acts of Congress.

7 The project for flood protection on the Clear Fork of the  
8 Brazos River at and in the vicinity of Abilene, Texas, is  
9 hereby authorized substantially as recommended by the Chief  
10 of Engineers in House Document Numbered 506, Eighty-  
11 seventh Congress, at an estimated cost of \$31,200,000.

## TULAROSA BASIN

12  
13 The project for flood protection at Alamogordo, New  
14 Mexico, is hereby authorized substantially in accordance with  
15 the recommendations of the Chief of Engineers in House  
16 Document Numbered 473, Eighty-seventh Congress, at an  
17 estimated cost of \$2,040,000.

## RIO GRANDE BASIN

18  
19 The project for flood protection at Las Cruces, New  
20 Mexico, is hereby authorized substantially as recommended  
21 by the Chief of Engineers in Senate Document Numbered  
22 117, Eighty-seventh Congress, at an estimated cost of \$3,-  
23 350,000.

## ARKANSAS RIVER BASIN

1

2       In addition to previous authorizations, there is hereby  
3 authorized to be appropriated the sum of \$182,000,000 for  
4 the prosecution of the comprehensive plan of development for  
5 the Arkansas River Basin, approved in the Act of June 28,  
6 1938, as amended by subsequent Acts of Congress, and the  
7 said general comprehensive plan is modified to include the  
8 following item:

9       The Dardanelle lock and dam, Arkansas River, Arkansas,  
10 is hereby modified to provide for construction of a sewage  
11 outfall system for the city of Russellville, Arkansas, sub-  
12 stantially in accordance with plans of said city, approved by  
13 the Chief of Engineers, at an estimated cost of \$1,400,000.

14       The Secretary of the Army is hereby authorized and  
15 directed to cause an immediate study to be made under the  
16 direction of the Chief of Engineers of bank erosion on the  
17 Arkansas River between about river mile 455, near Musko-  
18 gee, Oklahoma, and about river mile 495, near Coweta,  
19 Oklahoma. Such project or projects are hereby authorized  
20 as determined to be feasible and justified by the Chief of  
21 Engineers and Secretary of the Army with the approval of  
22 the President unless within the first period of sixty calendar  
23 days of continuous session of the Congress after the date on  
24 which the report is submitted to it such report is disapproved  
25 by the Congress: *Provided*, That the requirements for co-

1 operation shall include provisions that local interests shall  
2 furnish all lands, easements, and rights-of-way; hold and  
3 save the United States free from damages; maintain and  
4 operate after completion; and make a cash contribution in  
5 recognition of any special benefits: *And provided further,*  
6 That with respect to any work found justified in the vicinity  
7 of Wybark, Oklahoma, local interests shall meet the require-  
8 ments as stated and shall make a cash contribution of not  
9 less than \$150,000 which shall include the value of all lands,  
10 easements, and rights-of-way required to be furnished, and  
11 the value of goods and services provided for purposes of  
12 project installation on a basis acceptable to the Chief of  
13 Engineers.

14 The project for improvement of the Verdigris River and  
15 tributaries, Oklahoma and Kansas, is hereby authorized sub-  
16 stantially in accordance with the recommendations of the  
17 Chief of Engineers in House Document Numbered 563,  
18 Eighty-seventh Congress, at an estimated cost of \$62,400,-  
19 000.

20 The project for flood protection on Big Hill Creek,  
21 Kansas, is hereby authorized substantially in accordance with  
22 the recommendations of the Chief of Engineers in House  
23 Document Numbered 577, Eighty-seventh Congress, at an  
24 estimated cost of \$3,785,000.

25 The project for the Kaw Reservoir, Arkansas River,



1 Oklahoma, is hereby authorized substantially in accordance  
2 with the recommendations of the Chief of Engineers in  
3 Senate Document Numbered 143, Eighty-seventh Congress,  
4 at an estimated cost of \$83,230,000: *Provided*, That nothing  
5 in this act shall be construed as authorizing the acquisition  
6 of additional lands for establishment of a national wildlife  
7 refuge at the reservoir.

8 The project for flood protection on Cow Creek, Kan-  
9 sas, is hereby authorized substantially in accordance with  
10 the recommendations of the Chief of Engineers in House  
11 Document Numbered 531, Eighty-seventh Congress, at  
12 an estimated cost of \$1,560,000.

13 The project for flood protection on the Arkansas River  
14 at Dodge City, Kansas, is hereby authorized substantially  
15 in accordance with the recommendations of the Chief of  
16 Engineers in House Document Numbered 498, Eighty-  
17 seventh Congress, at an estimated cost of \$2,133,000.

18 WHITE RIVER BASIN

19 In addition to previous authorizations, there is hereby  
20 authorized to be appropriated the sum of \$11,000,000 for  
21 the prosecution of the comprehensive plan of development  
22 for the White River Basin, authorized by the Act of June  
23 28, 1938, as amended by subsequent Acts of Congress.

24 The flood protection project for Village Creek, Jack-  
25 son and Lawrence Counties, Arkansas, is hereby authorized

1 substantially as recommended by the Chief of Engineers in  
2 House Document Numbered 352, Eighty-seventh Congress,  
3 at an estimated cost of \$1,968,000.

4 The project for flood protection on Village Creek,  
5 White River, and Mayberry Levee Districts, Arkansas, is  
6 hereby modified to provide for construction of a pumping  
7 plant, substantially as recommended by the Chief of Engi-  
8 neers in House Document Numbered 577, Eighty-seventh  
9 Congress, at an estimated additional cost of \$1,018,000.

#### 10 RED RIVER BASIN

11 That the general plan for flood control and other pur-  
12 poses on Red River below Denison Dam is hereby modified  
13 to authorize the Chief of Engineers to adjust the local coop-  
14 eration requirements of the McKinney Bayou, Arkansas and  
15 Texas, Maniece Bayou, Arkansas, and East Point, Louisiana,  
16 projects so as to bring such requirements in accord with the  
17 recommendations of the Secretary of the Army and approval  
18 of the President.

19 The project for Lake Kemp, Wichita River, Texas, is  
20 hereby authorized substantially in accordance with the rec-  
21 ommendations of the Chief of Engineers in Senate Docu-  
22 ment Numbered 144, Eighty-seventh Congress, at an esti-  
23 mated cost of \$6,410,000.

24 The modification of the Broken Bow Reservoir, Moun-

tain Fork River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 137, Eighty-seventh Congress, at an estimated cost of \$23,800,000.

The project for the Clayton and Tuskahoma Reservoirs, Kiamichi River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 145, Eighty-seventh Congress, at an estimated cost of \$29,748,000.

The project providing for the construction of two experimental water quality study projects in the Arkansas-Red River Basins, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 105, Eighty-seventh Congress, at an estimated cost of \$300,000.

#### MISSOURI RIVER BASIN

In addition to previous authorizations, there is hereby authorized to be appropriated the sum of \$140,000,000 for the prosecution of the comprehensive plan for the Missouri River Basin, approved in the Act of June 28, 1938, as amended by subsequent Acts of Congress, including the following projects in tributary basins, and the monetary authorization for said general comprehensive plan is increased accordingly.

(a) The Kaysinger Bluff Reservoir, Osage River, Mis-



souri, is hereby modified substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 578, Eighty-seventh Congress, at an estimated additional cost of \$43,245,000: *Provided*, That nothing in this act shall be construed as authorizing the acquisition of additional lands for the establishment of a national wildlife refuge at the reservoir.

(b) The project for the Kansas River, Kansas, Nebraska, and Colorado, is hereby authorized substantially in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers in Senate Document Numbered 122, Eighty-seventh Congress, at an estimated cost of \$88,070,000: *Provided*, That the authorization for the Woodbine Reservoir on Lyon Creek is deferred at this time, subject to submission of a new feasibility report to the Eighty-eighth Congress, which shall take into account the water and related land resource development plans of the Soil Conservation Service, the Kansas Water Resources Board, and Lyons Creek Watershed Joint District Numbered 41, and preparation of said report is hereby authorized.

The project for flood protection on White Clay Creek at Atchison, Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 151, Eighty-seventh Congress, at an estimated cost of \$3,495,000.

1       The project for flood protection on Papillion Creek and  
2       tributaries, Nebraska, is hereby authorized substantially in  
3       accordance with the recommendations of the Chief of Engi-  
4       neers in House Document Numbered 475, Eighty-seventh  
5       Congress, at an estimated cost of \$2,122,000.

6       The project for flood protection on Indian Creek, Iowa,  
7       is hereby authorized substantially in accordance with the  
8       recommendations of the Chief of Engineers in House Docu-  
9       ment Numbered 438, Eighty-seventh Congress, at an esti-  
10      mated cost of \$1,270,000.

11      The project for Grand River and tributaries, North and  
12      South Dakota, is hereby authorized substantially in accord-  
13      ance with the recommendations of the Chief of Engineers in  
14      House Document Numbered 574, Eighty-seventh Congress,  
15      at an estimated cost of \$2,670,000: *Provided*, That the  
16      project shall be constructed, operated, and maintained by  
17      the Chief of Engineers under the direction of the Secretary  
18      of the Army.

19      The requirements of local cooperation on the project for  
20      flood control on the Floyd River, Iowa, authorized by Public  
21      Law 85-500, as recommended by the Chief of Engineers in  
22      House Document Numbered 417, Eighty-fourth Congress, is  
23      hereby modified to read as follows: "*Provided*, That respon-  
24      sible local interests give assurances satisfactory to the Sec-

1   retary of the Army that they will (a) furnish without cost  
2   to the United States all lands, easements, and rights-of-way  
3   necessary for construction of the project; (b) hold and save  
4   the United States free from damages due to the construction  
5   works; (c) make without cost to the United States all neces-  
6   sary road, highway, highway bridges other than those re-  
7   quired to carry Interstate Highway 29 over the relocated  
8   Floyd River, and utility alterations and additions; (d) con-  
9   tribute in cash 0.84 per centum of the estimated first cost of  
10  the work for which the United States would be responsible,  
11  a contribution presently estimated at \$65,000; (e) upon  
12  authorization of the project, to take all possible action under  
13  Iowa law, short of actual purchase, to prevent additional  
14  developments within the right-of-way that might increase the  
15  overall cost of the project; and (f) maintain and operate all  
16  the works after completion in accordance with regulations  
17  prescribed by the Secretary of the Army.”

#### 18                   OHIO RIVER BASIN

19       In addition to previous authorizations, there is hereby  
20  authorized to be appropriated the sum of \$120,000,000 for  
21  the prosecution of the comprehensive plan for the Ohio River  
22  Basin, approved in the Act of June 22, 1936, as amended  
23  by subsequent Acts of Congress.

24       The project for flood protection on the Kokosing River,



1 Ohio, is hereby authorized substantially as recommended by  
2 the Chief of Engineers in House Document Numbered 220,  
3 Eighty-seventh Congress, at an estimated cost of \$2,438,000.

4 The project for flood protection on the Wabash River at  
5 and in the vicinity of Mount Carmel, Illinois, is hereby  
6 authorized substantially in accordance with the recommenda-  
7 tions of the Chief of Engineers in House Document Num-  
8 bered 573, Eighty-seventh Congress, at an estimated cost of  
9 \$1,417,000.

10 The project for flood protection on the Mad River above  
11 Huffman Dam, Ohio, is hereby authorized substantially in  
12 accordance with the recommendations of the Chief of Engi-  
13 neers in House Document Numbered 439, Eighty-seventh  
14 Congress, at an estimated cost of \$7,930,000.

15 The project for the Big South Fork of the Cumberland  
16 River, Kentucky and Tennessee, is hereby authorized sub-  
17 stantially in accordance with the recommendations of the  
18 Chief of Engineers in House Document Numbered 175,  
19 Eighty-seventh Congress. at an estimated cost of \$151,000,-  
20 000.

21 The project for the Kentucky River, Kentucky, is hereby  
22 authorized substantially in accordance with the recommenda-  
23 tions of the Chief of Engineers in House Document Num-  
24 bered 423, Eighty-seventh Congress, at an estimated cost of  
25 \$26,020,000.

1       The project for Twelvepole Creek, West Virginia, is  
2 hereby authorized substantially in accordance with the recom-  
3 mendations of the Chief of Engineers in House Document  
4 Numbered 520, Eighty-seventh Congress, at an estimated  
5 cost of \$11,000,000.

6       The project for the Guyandot River and tributaries,  
7 West Virginia, is hereby authorized substantially in accord-  
8 ance with the recommendations of the Chief of Engineers in  
9 House Document Numbered 569, Eighty-seventh Congress,  
10 second session, at an estimated cost of \$60,477,000.

11       The project for flood protection on the Buckhannon  
12 River, West Virginia, is hereby authorized substantially in  
13 accordance with the recommendations of the Chief of Engi-  
14 neers in Senate Document Numbered 43, Eighty-seventh  
15 Congress, at an estimated cost of \$1,206,000.

16       The project for flood protection on Crab Creek at  
17 Youngstown, Ohio, is hereby authorized substantially in  
18 accordance with the recommendations of the Chief of Engi-  
19 neers in House Document Numbered 440, Eighty-seventh  
20 Congress, at an estimated cost of \$2,268,000.

21       The project for the Scioto River, Ohio, is hereby author-  
22 ized substantially in accordance with the recommendations  
23 of the Secretary of the Army and the Chief of Engineers in  
24 House Document Numbered 587, Eighty-seventh Congress,  
25 at an estimated cost of \$55,307,000: *Provided*, That nothing

1 in this Act shall be construed as authorizing the acquisition  
2 of additional lands for the establishment of a wildlife refuge  
3 in this project.

4 The project for flood protection on the Allegheny River  
5 at Salamanca, New York, is hereby authorized substantially  
6 in accordance with the recommendations of the Chief of  
7 Engineers in House Document Numbered 166, Eighty-  
8 seventh Congress, at an estimated cost of \$1,390,000.

9 The project for French Creek, Pennsylvania, is hereby  
10 authorized substantially in accordance with the recommenda-  
11 tions of the Chief of Engineers in Senate Document Num-  
12 bered 95, Eighty-seventh Congress, at an estimated cost of  
13 \$23,102,000.

14 UPPER MISSISSIPPI RIVER BASIN

15 In addition to previous authorizations, there is hereby  
16 authorized to be appropriated the sum of \$31,000,000 for  
17 the prosecution of the comprehensive plan for the Upper  
18 Mississippi River Basin, approved in the Act of June 28,  
19 1938, as amended and supplemented by subsequent Acts of  
20 Congress.

21 The project for the Illinois River and tributaries, Illinois,  
22 Wisconsin, and Indiana, is hereby authorized substantially  
23 as recommended by the Chief of Engineers in House Docu-  
24 ment Numbered 472, Eighty-seventh Congress, at an esti-  
25 mated cost of \$71,465,000.



1       The project for Rend Lake, Illinois, is hereby authorized  
2 substantially in accordance with the recommendations of the  
3 Chief of Engineers in House Document Numbered 541,  
4 Eighty-seventh Congress, at an estimated cost of  
5 \$35,500,000.

6       The project for flood protection on the Mississippi River  
7 at and in the vicinity of Guttenberg, Iowa, is hereby author-  
8 ized substantially in accordance with the recommendations  
9 of the Chief of Engineers in House Document Numbered  
10 286, Eighty-seventh Congress, at an estimated cost of  
11 \$729,000.

12       The project for flood protection on the Mississippi River  
13 between Sainte Genevieve and Saint Marys, Missouri, is  
14 hereby authorized substantially in accordance with the recom-  
15 mendations of the Chief of Engineers in House Document  
16 Numbered 519, Eighty-seventh Congress, at an estimated  
17 cost of \$2,500,000.

18       The project for the Harrisonville and Ivy Landing Drain-  
19 age and Levee District Numbered 2, Illinois, is hereby au-  
20 thorized substantially in accordance with the recommenda-  
21 tions of the Chief of Engineers in House Document Num-  
22 bered 542, Eighty-seventh Congress, at an estimated cost  
23 of \$1,112,000.

24       The project for the Columbia Drainage and Levee Dis-  
25 trict Numbered 3, Illinois, is hereby authorized substantially

1 in accordance with the recommendations of the Chief of Engi-  
2 neers in House Document Numbered 543, Eighty-seventh  
3 Congress, at an estimated cost of \$986,000.

4 The project for the Prairie DuPont Levee and Sanitary  
5 District, Illinois, is hereby authorized substantially in accord-  
6 ance with the recommendations of the Chief of Engineers in  
7 House Document Numbered 540, Eighty-seventh Congress,  
8 at an estimated cost of \$921,000.

9 The project for flood protection on Richland Creek, Illi-  
10 nois, is hereby authorized substantially in accordance with  
11 the recommendations of the Chief of Engineers in House  
12 Document Numbered 571, Eighty-seventh Congress, at an  
13 estimated cost of \$4,995,000.

14 The project for the Joanna Reservoir, Salt River, Mis-  
15 souri, is hereby authorized substantially in accordance with  
16 the recommendations of the Chief of Engineers in House  
17 Document Numbered 507, Eighty-seventh Congress, at an  
18 estimated cost of \$63,300,000.

19 The project for flood protection on the Pecatonica River,  
20 Illinois and Wisconsin, is hereby authorized substantially in  
21 accordance with the recommendations of the Chief of Engi-  
22 neers in House Document Numbered 539, Eighty-seventh  
23 Congress, at an estimated cost of \$850,000.

24 The project for flood protection on Rock River at Rock-  
25 ford, Illinois, is hereby authorized substantially in accord-

1   ance with the recommendations of the Chief of Engineers  
2   in Senate Document Numbered 142, Eighty-seventh Con-  
3   gress, at an estimated cost of \$7,228,000.

4       The project for the Mississippi River urban areas from  
5   Hampton, Illinois, to mile 300, is hereby authorized sub-  
6   stantially in accordance with the recommendations of the  
7   Chief of Engineers in House Document Numbered 564,  
8   Eighty-seventh Congress, at an estimated cost of \$9,289,000.

9       The project for the Mississippi River urban areas from  
10   Hampton, Illinois, to Cassville, Wisconsin, is hereby author-  
11   ized substantially in accordance with the recommendations of  
12   the Chief of Engineers in House Document Numbered 450,  
13   Eighty-seventh Congress, at an estimated cost of \$5,350,000.

14       The project for the Kickapoo River, Wisconsin, is hereby  
15   authorized substantially as recommended by the Chief of  
16   Engineers in House Document Numbered 557, Eighty-  
17   seventh Congress, at an estimated cost of \$15,570,000.

18       The project for flood protection on the Warroad River  
19   and Bull Dog Creek, Minnesota, is hereby authorized sub-  
20   stantially in accordance with the recommendations of the  
21   Chief of Engineers in House Document Numbered 449,  
22   Eighty-seventh Congress, at an estimated cost of \$972,000.

23                   GREAT LAKES BASIN

24       The project for flood protection on the River Rouge,  
25   Michigan, is hereby authorized substantially in accordance



1 with the recommendations of the Chief of Engineers in House  
2 Document Numbered 148, Eighty-seventh Congress, at an  
3 estimated cost of \$8,659,000.

4 The project for flood protection on the Sandusky River,  
5 Ohio, is hereby authorized substantially in accordance with  
6 the recommendations of the Chief of Engineers in Senate  
7 Document Numbered 136, Eighty-seventh Congress, at an  
8 estimated cost of \$4,300,000.

9 GILA RIVER BASIN

10 The project for the Camelsback Reservoir, Gila River,  
11 Arizona, is hereby authorized substantially in accordance  
12 with the recommendations of the Chief of Engineers in  
13 Senate Document Numbered 127, Eighty-seventh Congress,  
14 at an estimated cost of \$9,770,000.

15 The project for flood protection on the Gila River below  
16 Painted Rock Reservoir, Arizona, is hereby authorized  
17 substantially in accordance with the recommendations of the  
18 Chief of Engineers in Senate Document Numbered 116,  
19 Eighty-seventh Congress, at an estimated cost of  
20 \$18,255,000.

21 The project for flood protection on Pinal Creek, Arizona,  
22 is hereby authorized substantially in accordance with the  
23 recommendations of the Chief of Engineers in House Docu-  
24 ment Numbered 512, Eighty-seventh Congress, at an esti-  
25 mated cost of \$1,300,000.

## TRUCKEE RIVER BASIN

The project for flood protection on the Truckee River and tributaries, California and Nevada, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 435, Eighty-seventh Congress, at an estimated cost of \$2,385,000.

## SAN FRANCISCO BAY AREA

The project for flood protection on Alameda Creek, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 128, Eighty-seventh Congress, at an estimated cost of \$14,680,000.

The project for Corte Madera Creek, Marin County, California, is hereby authorized substantially in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers in House Document Numbered 545, Eighty-seventh Congress, at an estimated cost of \$5,534,000: *Provided*, that local interests shall contribute in cash 3 per centum of the Federal construction of the Rose Valley unit with a contribution presently estimated at \$158,000.

## SAN JOAQUIN RIVER BASIN

The general comprehensive plan for flood control and other purposes on the lower San Joaquin River and tributaries, including Tuolumne and Stanislaus Rivers, California,

1 approved in the Flood Control Act of December 22, 1944,  
2 as amended and supplemented by subsequent Acts of Con-  
3 gress, is hereby further amended to provide for the modifi-  
4 cation of the New Melones Dam on the Stanislaus River,  
5 substantially in accordance with the recommendations of the  
6 Chief of Engineers in House Document Numbered 453,  
7 Eighty-seventh Congress, at an estimated additional cost of  
8 \$113,717,000, and the authorization for said comprehensive  
9 plan is hereby increased accordingly.

10 The Hidden Reservoir, Fresno River, California, is  
11 hereby authorized substantially in accordance with the recom-  
12 mendations of the Chief of Engineers in Senate Document  
13 Numbered 37, Eighty-seventh Congress, at an estimated  
14 cost of \$14,338,000.

15 The Buchanan Reservoir, Chowchilla River, California,  
16 is hereby authorized substantially in accordance with the  
17 recommendations of the Chief of Engineers in Senate Docu-  
18 ment Numbered 98, Eighty-seventh Congress, at an esti-  
19 mated cost of \$13,585,000.

20 The project for flood protection on Mormon Slough,  
21 Calaveras River, California, is hereby authorized substan-  
22 tially in accordance with the recommendations of the Chief of  
23 Engineers in House Document Numbered 576, Eighty-  
24 seventh Congress, at an estimated cost of \$1,960,000.



## RUSSIAN RIVER BASIN

The project for Russian River, Dry Creek, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 547, Eighty-seventh Congress, at an estimated cost of \$42,400,000.

## REDWOOD CREEK BASIN

The project for flood protection on Redwood Creek, Humboldt County, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 497, Eighty-seventh Congress, at an estimated cost of \$2,580,000.

## LOS ANGELES RIVER BASIN

In addition to previous authorizations, there is hereby authorized to be appropriated the sum of \$38,000,000 for the prosecution of the comprehensive plan for the Los Angeles River Basin approved in the Act of August 18, 1941, as amended and supplemented by subsequent Acts of Congress.

## ROGUE RIVER BASIN

The project for the Rogue River, Oregon and California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 566, Eighty-seventh Congress, at an esti-

1 mated cost of \$106,700,000, subject to the conditions of local  
2 cooperation specified in said report: *Provided*, That the proj-  
3 ect is to be located, constructed, and operated to accomplish  
4 the benefits as set forth and described in the report and  
5 appendixes: *And provided further*, That in the years of  
6 short water supply all water users will share the available  
7 water in the same proportions that they would share the  
8 total full supply when it is available, and that no further  
9 water-use allocations will be made from the authorized stor-  
10 age so as to retain the maximum possible benefits to author-  
11 ized uses during the periods of adversity when storage short-  
12 ages occur.

#### 13 COLUMBIA RIVER BASIN

14 In addition to previous authorizations, there is hereby  
15 authorized to be appropriated the sum of \$226,000,000 for  
16 the projects and plans for the Columbia River Basin, includ-  
17 ing the Willamette River Basin, authorized by the Flood  
18 Control Act of June 28, 1938, and subsequent Acts of  
19 Congress, including the Flood Control Acts of May 17, 1950,  
20 September 3, 1954, July 3, 1958, and July 14, 1960, and  
21 these projects and plans are hereby modified to include the  
22 projects listed below for flood control and other purposes in  
23 the Columbia River Basin (including the Willamette River  
24 Basin) substantially in accordance with the recommenda-

1 tions of the Chief of Engineers in House Document Num-  
2 bered 403, Eighty-seventh Congress: *Provided*, That the  
3 depth and width of the authorized channel in the Columbia-  
4 Snake River barge navigation project shall be established as  
5 fourteen feet and two hundred and fifty feet, respectively, at  
6 minimum regulated flow.

7 Knowles Dam and Reservoir, Flathead River, Mon-  
8 tana;

9 China Gardens Dam, Snake River, Idaho and  
10 Oregon;

11 Asotin Dam, Snake River, Idaho and Washington;

12 Bruces Eddy Dam and Reservoir, North Fork,  
13 Clearwater River, Idaho;

14 Strube Reregulating Dam and Reservoir, South  
15 Fork, McKenzie River, Oregon;

16 Gate Creek Dam and Reservoir, Gate Creek,  
17 Oregon;

18 Fern Ridge Dam and Reservoir modification, Long  
19 Tom River, Oregon;

20 Cascadia Dam and Reservoir, South Santiam River,  
21 Oregon.

22 *Provided*, That the Knowles Dam and Reservoir, Flathead  
23 River, Montana, shall be constructed, operated, and main-  
24 tained by the Bureau of Reclamation, Department of the



1 Interior, and the sum of \$50,000,000 is hereby authorized  
2 to be appropriated for the partial accomplishment of said  
3 project.

4 The project for the Burns Creek Dam and Reservoir,  
5 Snake River, Idaho, is hereby authorized substantially in ac-  
6 cordance with the recommendations of the Chief of Engineers  
7 in Senate Document Numbered 130, Eighty-seventh Con-  
8 gress, at an estimated cost of \$52,000,000.

9 The project for the Ririe Dam and Reservoir, Willow  
10 Creek, Idaho, is hereby authorized substantially in accord-  
11 ance with the recommendations of the Chief of Engineers  
12 in House Document Numbered 562, Eighty-seventh Con-  
13 gress, at an estimated cost of \$7,027,000.

14 The project for the Blackfoot Dam and Reservoir, Black-  
15 foot River, Idaho, is hereby authorized substantially in ac-  
16 cordance with the recommendations of the Chief of Engi-  
17 neers in House Document Numbered 568, Eighty-seventh  
18 Congress, at an estimated cost of \$829,000.

#### WYNOOCHEE RIVER

19 The project for the Wynoochee River, Washington, is  
20 hereby authorized substantially in accordance with the rec-  
21 ommendations of the Chief of Engineers in House Document  
22 Numbered —, Eighty-seventh Congress, at an estimated cost  
23 of \$40,211,000: *Provided*, That the installation of the power-  
24 generating facilities shall not be made until the Chief of  
25

1 Engineers shall submit a reexamination report to the Con-  
2 gress for authorization.

3 COOK INLET, ALASKA

4 The project for Bradley Lake, Cook Inlet, Alaska, is  
5 hereby authorized substantially in accordance with the recom-  
6 mendations of the Chief of Engineers in House Document  
7 Numbered 455, Eighty-seventh Congress, at an estimated  
8 cost of \$45,750,000: *Provided*, That operation and mainte-  
9 nance shall be through the Secretary of the Interior.

10 SEC. 204. (a) For the purpose of developing hydro-  
11 electric power and to encourage and promote the economic  
12 development of and to foster the establishment of essential  
13 industries in the State of Alaska, and for other purposes, the  
14 Secretary of the Army, acting through the Chief of Engi-  
15 neers, is authorized to construct and the Secretary of the In-  
16 terior is authorized to operate and maintain the Crater-Long  
17 Lakes division of the Snettisham project near Juneau, Alaska.  
18 The works of the division shall consist of pressure tunnels,  
19 surge tanks, penstocks, a powerplant, transmission facilities,  
20 and related facilities, all at an estimated cost of \$41,634,000.

21 (b) Electric power and energy generated at the divi-  
22 sion except that portion required in the operation of the  
23 division, shall be disposed of by the Secretary of the In-  
24 terior in such a manner as to encourage the most widespread  
25 use thereof at the lowest possible rates to consumers con-

1   sistent with sound business principles. Rate schedules shall  
2   be drawn having regard to the recovery of the costs of pro-  
3   ducing and transmitting the power and energy, including  
4   the amortization of the capital investment over a reasonable  
5   period of years, with interest at the average rate (which  
6   rate shall be certified by the Secretary of the Treasury) paid  
7   by the United States on its marketable long-term securities  
8   outstanding on the date of this Act and adjusted to the near-  
9   est one-eighth of 1 per centum. In the sale of such power  
10   and energy, preference shall be given to Federal agencies,  
11   public bodies, and cooperatives. It shall be a condition of  
12   every contract made under this Act for the sale of power  
13   and energy that the purchaser, if it be a purchaser for resale,  
14   will deliver power and energy to Federal agencies or facili-  
15   ties thereof within its transmission area at a reasonable  
16   charge for the use of its transmission facilities. All receipts  
17   from the transmission and sale of electric power and energy  
18   generated at said division shall be covered into the Treasury  
19   of the United States to the credit of miscellaneous receipts.

20       (c) The appropriate Secretary is authorized to perform  
21   any and all acts and enter into such agreements as may be  
22   appropriate for the purpose of carrying the provisions of this  
23   Act into full force and effect, including the acquisition of  
24   rights and property, and the Secretary of the Army, when  
25   an appropriation shall have been made for the commence-



1 ment of construction or the Secretary of the Interior in the  
2 case of operation and maintenance of said division, may, in  
3 connection with the construction or operation and mainte-  
4 nance of such division, enter into contracts for miscellaneous  
5 services for materials and supplies, as well as for construc-  
6 tion, which may cover such periods of time as the appropriate  
7 Secretary may consider necessary but in which the liability  
8 of the United States shall be contingent upon appropriations  
9 being made therefor.

10 SEC. 205. (a) The Secretary of the Interior is author-  
11 ized to construct, operate, and maintain the Waurika reclama-  
12 tion project, Oklahoma, in accordance with the Federal  
13 reclamation laws (Act of June 17, 1902, 32 Stat. 388, and  
14 Acts amendatory thereof or supplementary thereto), except  
15 so far as those laws are inconsistent with this section, for the  
16 principal purpose of storing, regulating, and furnishing water  
17 for municipal, domestic, and industrial use, for irrigation, for  
18 controlling floods, and for the conservation and development  
19 of fish and wildlife and the enhancement of recreational op-  
20 portunities. The Waurika project shall consist of the follow-  
21 ing principal works: the Waurika Dam and Reservoir, an  
22 aqueduct system, pumps, canals, laterals, drains, and other  
23 irrigation works.

24 (b) In constructing, operating, and maintaining the  
25 Waurika project, the Secretary shall allocate the costs thereof

1 among different functions resulting from multiple-purpose  
2 development under the following conditions:

3 (1) Allocations to flood control, recreation, and the  
4 conservation and development of fish and wildlife shall be  
5 nonreimbursable and nonreturnable under the reclamation  
6 laws.

7 (2) Allocations to municipal water supplies, including  
8 domestic, manufacturing, and industrial uses shall be repay-  
9 able through contracts with municipal corporations, or other  
10 organizations as defined by section 2, Reclamation Project  
11 Act of 1939 (53 Stat. 1187), under the provisions of the  
12 Federal reclamation laws, and, to the extent appropriate,  
13 under the provisions of the Water Supply Act of 1958 (72  
14 Stat. 319). Such contracts shall precede the commence-  
15 ment of construction of any project unit affecting the indi-  
16 vidual municipality or industrial users, and shall provide for  
17 all repayment of construction costs allocated to municipal  
18 water supplies in not to exceed fifty years from the date water  
19 is first delivered for that purpose, and notwithstanding the  
20 provisions of the Water Supply Act of 1958 relating to the  
21 rate of interest. Payment of said construction cost shall in-  
22 clude interest on the unamortized balance of that allocation at  
23 a rate equal to the average rate (which rate shall be certified  
24 by the Secretary of the Treasury) paid by the United States  
25 on its marketable long-term securities outstanding on the date

1 of enactment of this Act and adjusted to the nearest one-  
2 eighth of 1 per centum: *Provided*, That such contracts shall  
3 provide that annual municipal and industrial payments shall  
4 be continued, after the municipal and industrial water supply  
5 obligation has been fully repaid with interest as provided  
6 above, at such annual rate and for such period of time as may  
7 be determined by the Secretary as is necessary to fully repay  
8 costs allocated to irrigation which will not be repaid by the  
9 irrigators as provided in subsection (b) (3) of this section.

10 (3) Any contract entered into under section 9, subsec-  
11 tion (d), of the Reclamation Project Act of 1939 for pay-  
12 ment of those portions of the cost of constructing, operating,  
13 and maintaining the Waurika project, which are properly  
14 allocable to irrigation, and which are assigned to be paid by  
15 the contracting organization, shall provide for the repayment  
16 of the portion of the construction cost of the project assigned  
17 to any contract unit or, if the contract unit be divided into  
18 two or more blocks, to any such block, over a period not to  
19 exceed fifty years, exclusive of any permissible development  
20 period: *Provided*, That appropriate adjustment shall be made  
21 in the amount that irrigation water users shall repay due to  
22 payments made by municipal and industrial water users on  
23 cost allocated to irrigation as provided in subsection (b) (2)  
24 of this section: *And provided further*, That such contracts  
25 may be entered into without regard to the last sentence of



1 section 9, subsection (c), of the Reclamation Project Act of  
2 1939.

3 (4) The water users' organization shall be responsible  
4 for disposal of all water surplus to its requirements, and the  
5 revenues therefrom shall be used by the organization for the  
6 retirement of project debt payment, payment of interest,  
7 and payment of operation and maintenance cost of the  
8 project: *Provided*, That nothing in this section is intended  
9 to preclude the temporary furnishing of irrigation water  
10 under contracts appropriate for that purpose, from Waurika  
11 Reservoir with or without the construction of specific irriga-  
12 tion works.

13 (5) Upon the completion of the payment of the water  
14 users' construction cost obligation, together with the interest  
15 thereon, the water users shall have a permanent right to the  
16 use of that portion of the project allocable to municipal, in-  
17 dustrial, and irrigation water supply purposes so long as the  
18 space designated for those purposes may be physically avail-  
19 able, taking into account such equitable reallocation of reser-  
20 voir storage capacities among the purposes served by the  
21 project as may be necessary due to sedimentation.

22 (c) The Secretary is authorized to transfer to a water  
23 users' organization the care, operation, and maintenance  
24 of the works herein authorized and, if such transfer is made,  
25 to deduct from the costs allocated to municipal water use

1 the reasonable capitalized equivalent of that portion of the  
2 estimated operation and maintenance cost of the undertaking  
3 which, if the United States continued to operate the project,  
4 would be allocated to flood control and fish and wildlife  
5 purposes, and to deduct from the costs allocated to irrigation  
6 the reasonable capitalized equivalent of the total additional  
7 cost during the irrigation repayment period of operating  
8 the screens for protection of fish at the irrigation intake.  
9 Prior to the taking over of the care, operation, and maintenance  
10 of said works, the water users' organization shall  
11 obligate itself to operate them in accordance with regulations  
12 prescribed by the Secretary of the Army with respect to  
13 flood control and the Secretary of the Interior with respect  
14 to fish and wildlife.

15 (d) (1) The Secretary is authorized, in connection with  
16 the works authorized by this section, to construct minimum  
17 basic recreational facilities and to arrange for the operation  
18 and maintenance of the same by an appropriate State or local  
19 agency or organization. The cost of constructing such facilities  
20 shall be nonreimbursable and nonreturnable under the  
21 Federal reclamation laws.

22 (2) The Secretary may, upon conclusion of a suitable  
23 agreement with any qualified agency of the State of Oklahoma  
24 or a political subdivision thereof for assumption of  
25 the administration, operation, and maintenance thereof at

1 the earliest practicable date, construct or permit the con-  
2 struction of public park and recreation facilities on lands  
3 owned by the United States adjacent to the Waurika Reser-  
4 voir when such use is determined by the Secretary not to be  
5 contrary to the public interest, all under such rules and regu-  
6 lations as the Secretary may prescribe. No recreational use  
7 of any area to which this subsection applies shall be per-  
8 mitted which is inconsistent with the laws of the State of  
9 Oklahoma for the protection of fish and game, and the pro-  
10 tection of the public health, safety, and welfare. The cost of  
11 constructing, operating, and maintaining the facilities au-  
12 thorized by this subsection shall not be charged to or become  
13 a part of the costs of the Waurika project.

14 (e) Expenditures for Waurika Reservoir, and the water  
15 supply aqueduct system, may be made without regard to  
16 the soil survey and land classification requirements of the  
17 Interior Department Appropriation Act, 1954 (43 U.S.C.  
18 390a).

19 (f) The construction, operation, and maintenance of  
20 the Waurika reclamation project shall be subject to and in  
21 accordance with the provisions of the Act of July 1, 1932  
22 (47 Stat. 564).

23 (g) There is hereby authorized to be appropriated for  
24 construction of the works authorized to be constructed by  
25 subsection (a) of this section the sum of \$25,019,500, plus



1 or minus such amounts, if any, as may be required by reason  
2 of changes in the cost of construction of the types involved  
3 in the Waurika project as shown by engineering indices.  
4 There are also authorized to be appropriated such sums as  
5 may be required for the operation and maintenance of said  
6 works.

7 SEC. 206. Section 205 of the Flood Control Act of  
8 1948, as amended (33 U.S.C. 701s), is amended (a) by  
9 striking out "\$10,000,000" and inserting in lieu thereof  
10 "\$25,000,000", (b) by striking out the term "small flood  
11 control projects" and inserting in lieu thereof the term  
12 "small projects for flood control and related purposes",  
13 and (c) by striking out "*Provided*, That not more than  
14 \$400,000 shall be allotted for this purpose at any single  
15 locality from the appropriations for any one fiscal year"  
16 and inserting in lieu thereof "*Provided*, That not more than  
17 \$1,000,000 shall be allotted under this section for a project  
18 at any single locality and the amount allotted shall be suffi-  
19 cient to complete Federal participation in the project".

20 SEC. 207. Section 5 of the Flood Control Act approved  
21 August 18, 1941, as amended (33 U.S.C. 701n), is hereby  
22 further amended to read as follows: "That there is hereby  
23 authorized an emergency fund in the amount of \$15,000,000  
24 to be expended in flood emergency preparation, in flood  
25 fighting and rescue operations, or in the repair or restora-

1 tion of any flood control work threatened or destroyed by  
2 flood, including the strengthening, raising, extending, or  
3 other modification thereof as may be necessary in the dis-  
4 cretion of the Chief of Engineers for the adequate functioning  
5 of the work for flood control; in the emergency protection  
6 of federally authorized hurricane or shore protection being  
7 threatened when in the discretion of the Chief of Engineers  
8 such protection is warranted to protect against imminent and  
9 substantial loss to life and property; in the repair and resto-  
10 ration of any federally authorized hurricane or shore pro-  
11 tective structure damaged or destroyed by wind, wave, or  
12 water action of other than an ordinary nature when in the  
13 discretion of the Chief of Engineers such repair and restora-  
14 tion is warranted for the adequate functioning of the struc-  
15 ture for hurricane or shore protection. The appropriation  
16 of such moneys for the initial establishment of this fund  
17 and for its replenishment on an annual basis is hereby  
18 authorized: *Provided*, That pending the appropriation of  
19 said sum, the Secretary of the Army may allot, from exist-  
20 ing civil functions appropriations, such sums as may be  
21 necessary for the immediate prosecution of the work herein  
22 authorized, such appropriations to be reimbursed from the  
23 appropriation herein authorized when made. The Chief of  
24 Engineers is authorized, in the presecution of work in con-  
25 nection with rescue operations, or in conducting other emer-

1 gency work, to acquire on a rental basis such motor vehicles,  
2 including passenger cars and buses, as in his discretion are  
3 deemed necessary.”

4 SEC. 208. Section 4 of the Act entitled “An Act author-  
5 izing the construction of certain public works on rivers and  
6 harbors for flood control, and for other purposes”, approved  
7 December 22, 1944, as amended by section 4 of the Flood  
8 Control Act of July 24, 1946, and by section 209 of the  
9 Flood Control Act of 1954, is hereby further amended to  
10 read as follows:

11 “SEC. 4. The Chief of Engineers, under the supervision  
12 of the Secretary of the Army, is authorized to construct,  
13 maintain, and operate public park and recreational facilities  
14 at water resource development projects under the control  
15 of the Department of the Army, to permit the construction  
16 of such facilities by local interests (particularly those to be  
17 operated and maintained by such interests), and to permit the  
18 maintenance and operation of such facilities by local interests.  
19 The Secretary of the Army is also authorized to grant leases  
20 of lands, including structures or facilities thereon, at water re-  
21 source development projects for such periods, and upon such  
22 terms and for such purposes as he may deem reasonable in the  
23 public interest: *Provided*, That leases to nonprofit organi-  
24 zations for park or recreational purposes may be granted at  
25 reduced or nominal considerations in recognition of the public



1 service to be rendered in utilizing the leased premises:  
2 *Provided further*, That preference shall be given to Federal,  
3 State, or local governmental agencies, and licenses or leases  
4 where appropriate, may be granted without monetary con-  
5 siderations, to such agencies for the use of all or any portion  
6 of a project area for any public purpose, when the Secretary  
7 of the Army determines such action to be in the public  
8 interest, and for such periods of time and upon such condi-  
9 tions as he may find advisable: *And provided further*, That  
10 in any such lease or license to a Federal, State, or local  
11 governmental agency which involves lands to be utilized for  
12 the development and conservation of fish and wildlife,  
13 forests, and other natural resources, the licensee or lessee  
14 may be authorized to cut timber and harvest crops as may  
15 be necessary to further such beneficial uses and to collect  
16 and utilize the proceeds of any sales of timber and crops  
17 in the development, conservation, maintenance, and utiliza-  
18 tion of such lands. Any balance of proceeds not so utilized  
19 shall be paid to the United States at such time or times as  
20 the Secretary of the Army may determine appropriate. The  
21 water areas of all such projects shall be open to pub-  
22 lic use generally, without charge, for boating, swimming,  
23 bathing, fishing, and other recreational purposes, and  
24 ready access to and exit from such areas along the shores  
25 of such projects shall be maintained for general public use,

1 when such use is determined by the Secretary of the Army  
2 not to be contrary to the public interest, all under such rules  
3 and regulations as the Secretary of the Army may deem  
4 necessary. No use of any area to which this section applies  
5 shall be permitted which is inconsistent with the laws for the  
6 protection of fish and game of the State in which such area  
7 is situated. All moneys received by the United States for  
8 leases or privileges shall be deposited in the Treasury of the  
9 United States as miscellaneous receipts.”

10 SEC. 209. Section 207 of the Flood Control Act of 1960  
11 (74 Stat. 501) is hereby amended to read as follows:

12 “SEC. 207. (a) When used in this section—

13 “(1) The term ‘Agency’ means the Corps of Engineers,  
14 United States Army or the Bureau of Reclamation, United  
15 States Department of the Interior, whichever has jurisdic-  
16 tion over the project concerned.

17 “(2) The term ‘head of the Agency concerned’ means  
18 the Chief of Engineers or the Commissioner, Bureau of Rec-  
19 lamation, or their respective designees.

20 “(3) The term ‘water resources projects to be con-  
21 structed in the future’ includes all projects not yet actually  
22 under construction, and, to the extent of work remaining to  
23 be completed, includes projects presently under construc-  
24 tion where road relocations or identifiable components thereof  
25 are not complete as of the date of this section.

1       “(4) The term ‘time of the taking’ is the date of the  
2 relocation agreement, the date of the filing of a condemnation  
3 proceeding, or a date agreed upon between the parties as the  
4 date of taking.

5       “(b) Whenever, in connection with the construction  
6 of any authorized flood control, navigation, irrigation, or mul-  
7 tiple-purpose project for the development of water resources,  
8 the head of the Agency concerned determines it to be in the  
9 public interest to utilize existing public roads as a means of  
10 providing access to such projects during construction, such  
11 Agency may improve, reconstruct, and maintain such roads  
12 and may contract with the local authority having jurisdiction  
13 over the roads to accomplish the necessary work. The ac-  
14 complishment of such work of improvement may be carried  
15 out with or without obtaining any interest in the land on  
16 which the road is located in accordance with mutual agree-  
17 ment between the parties: *Provided*, (1) That the head of  
18 the Agency concerned determines that such work would  
19 result in a saving in Federal cost as opposed to the cost of  
20 providing a new access road at Federal expense, (2) that,  
21 at the completion of construction, the head of the Agency  
22 concerned will, if necessary, restore the road to at least as  
23 good condition as prior to the beginning of utilization for  
24 access during construction, and (3) that, at the completion



1 of construction, the responsibility of the Agency for improve-  
2 ment, reconstruction, and maintenance shall cease.

3 “(c) For water resources projects to be constructed in  
4 the future, when the taking by the Federal Government of  
5 an existing public road necessitates replacement, the substi-  
6 tute provided will, as nearly as practicable, serve in the same  
7 manner and reasonably as well as the existing road. The  
8 head of the Agency concerned is authorized to construct such  
9 substitute roads to design standards comparable to those of  
10 the State, or, where applicable State standards do not exist,  
11 those of the owning political division in which the road is  
12 located, for roads of the same classification as the road being  
13 replaced. The traffic existing at the time of the taking shall  
14 be used in the determination of the classification. In  
15 any case where a State or political subdivision thereof  
16 requests that such a substitute road be constructed to a higher  
17 standard than that provided in the preceding provisions of  
18 this subsection, and pays, prior to commencement of such  
19 construction, the additional costs involved due to such higher  
20 standard, such Agency head is authorized to construct such  
21 road to such higher standard. Federal costs under the pro-  
22 visions of this subsection shall be part of the nonreimbursable  
23 project costs.”

24 SEC. 210. The Secretary of the Army is hereby author-

1 ized and directed to cause surveys for flood control and  
2 allied purposes, including channel and major drainage im-  
3 provements, and floods aggravated by or due to wind or tidal  
4 effects, to be made under the direction of the Chief of Engi-  
5 neers, in drainage areas of the United States and its terri-  
6 torial possessions, which include the following named local-  
7 ities: *Provided*, That after the regular or formal reports  
8 made on any survey are submitted to Congress, no supple-  
9 mental or additional report or estimate shall be made unless  
10 authorized by law except that the Secretary of the Army  
11 may cause a review of any examination or survey to be  
12 made and a report thereon submitted to Congress, if such  
13 review is required by the national defense or by changed  
14 physical or economic conditions: *Provided further*, That the  
15 Government shall not be deemed to have entered upon any  
16 project for the improvement of any waterway or harbor  
17 mentioned in this title until the project for the proposed work  
18 shall have been adopted by law:

19       Valenciana River, Puerto Rico.

20       Waccasassa River (Levy County and Gilchrist County),  
21 Florida.

22       Lake Pontchartrain, North Shore, Louisiana.

23       Peytons Creek and tributaries, Texas.

24       Clear Creek, Texas.

25       San Bernard River, Texas.

1       Arkansas River Basin, with reference to the effect of  
2 the Eufaula and Keystone Reservoirs, Oklahoma, on the  
3 water supply facilities of the cities of McAlester and Yale,  
4 respectively, with a view to determining the extent of Fed-  
5 eral participation in the replacement of the cities' water sup-  
6 ply facilities in equity without regard to limitation contained  
7 in existing Corps of Engineers protective and relocation  
8 plans.

9       Cumberland River, Kentucky and Tennessee, with ref-  
10 erence to the effect of the Barkley Dam project, on the water  
11 supply and sewage treatment facilities of the cities of Cadiz,  
12 Kuttawa, and Eddyville, Kentucky, and the State peni-  
13 tentiary at Eddyville, Kentucky, respectively, with a view  
14 to determining the extent of Federal participation in the  
15 replacement of their water supply and sewage treatment  
16 facilities in equity without regard to limitation contained  
17 in existing Corps of Engineers protective and relocation  
18 plans.

19       Missouri River Basin, with reference to the effect of  
20 Oahe and Garrison Reservoirs, North Dakota and South  
21 Dakota, on the sewage treatment facilities of the cities of  
22 Bismarck and Mandan, North Dakota, respectively, with a  
23 view to determining the extent of Federal participation in  
24 the sewage treatment facilities in equity without regard to



1 limitation contained in existing Corps of Engineers pro-  
2 tective and relocation plans.

3 All streams in Santa Barbara County, California, drain-  
4 ing the Santa Ynez Mountains, except Santa Ynez River  
5 and tributaries.

6 Sacramento River Basin and streams in northern Cali-  
7 fornia draining into the Pacific Ocean for the purposes of  
8 developing, where feasible, multiple-purpose water resource  
9 projects, particularly those which would be eligible under the  
10 provisions of title III of Public Law 85-500.

11 Battle Creek, Sacramento River, California.

12 Kaskaskia River levees, Illinois; review of require-  
13 ments of local cooperation.

14 Puget Sound, Washington, and adjacent waters, includ-  
15 ing tributaries, in the interest of flood control, navigation, and  
16 other water uses and related land resources.

17 Harbors and rivers in Hawaii, with a view to determi-  
18 ning the advisability of improvements in the interest of  
19 navigation, flood control, hydroelectric power development,  
20 water supply, and other beneficial water uses, and related  
21 land resources.

22 Waimea River, Kokee Area, Kauai, Hawaii, for multiple  
23 purposes.

1        Waipio River, Kohala-Hamakua coast, Island of  
2 Hawaii, for multiple purpose development.

3        Iso River, Wiluku, Maui, Hawaii.

4        SEC. 211. In addition to previous authorizations, there  
5 is hereby authorized to be appropriated the sum of  
6 \$100,000,000 for the prosecution of the comprehensive plan  
7 adopted by section 9 (a) of the Act approved December 22,  
8 1944 (Public Law Numbered 534, Seventy-eighth Con-  
9 gress), as amended and supplemented by subsequent Acts  
10 of Congress, for continuing the works in the Missouri River  
11 Basin to be undertaken under said plans by the Secretary  
12 of the Interior.

13        SEC. 212. Title II of this Act may be cited as the "Flood  
14 Control Act of 1962".

87<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

**S. 3773**

[Report No. 2258]

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# A BILL

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Authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

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By Mr. CHAVEZ

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OCTOBER 1, 1962

Read twice and ordered to be placed on the calendar



# RIVER AND HARBOR, BEACH EROSION, AND FLOOD CONTROL PROJECTS

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## REPORT OF THE COMMITTEE ON PUBLIC WORKS ON

H.R. 13273

A BILL AUTHORIZING THE CONSTRUCTION, REPAIR,  
AND PRESERVATION OF CERTAIN PUBLIC WORKS ON  
RIVERS AND HARBORS FOR NAVIGATION, FLOOD  
CONTROL, AND FOR OTHER PURPOSES



OCTOBER 1, 1962.—Committed to the Committee of the Whole House  
on the State of the Union and ordered to be printed

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WASHINGTON : 1962

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## RIVER AND HARBOR, BEACH EROSION CONTROL, AND FLOOD CONTROL PROJECTS, 1962

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OCTOBER 1, 1962.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

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Mr. DAVIS of Tennessee, from the Committee on Public Works, submitted the following

### R E P O R T

[To accompany H.R. 13273]

#### GENERAL STATEMENT

The Committee on Public Works, to whom was referred the bill (H.R. 13273) authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes, having considered the same, report favorably thereon with amendments and recommend that the bill as amended do pass.

The committee amendments are shown in linetype and italic in the reported bill.

The River and Harbor Subcommittee and the Flood Control Subcommittee have taken testimony on all the matters contained in the bill, beginning on May 8, 1962. Both subcommittees and the full committee have met in executive sessions for discussion of these matters.

#### EXPLANATION OF BILL

H.R. 13273 is similar to the omnibus river and harbor and flood control bills of 1960 and preceding years, which have been considered at intervals of 2 to 4 years.

The purposes of the bill are to authorize construction of certain projects for navigation, beach erosion control, flood control, and other purposes, on which favorable recommendations have been made by the Chief of Engineers; authorize an increase in the monetary authorization for one comprehensive river basin plan previously approved by the Congress; authorize surveys of problems on streams and at other localities, to be carried out by the Corps of Engineers; provide for reimbursement to local interests for work done on authorized beach erosion control projects, and other matters.

The bill is divided into two parts. Title I covers river and harbor works, including navigation and beach erosion control projects and matters related thereto. Title II covers flood control works, hurricane protection works, multiple-purpose works including and related to flood control and hurricane protection, and matters related thereto. The monetary amounts for authorization in each title are summarized in the table following these introductory paragraphs.

### COMMITTEE AMENDMENTS

A full explanation of the committee amendments is given starting on page 231.

### NEED FOR BILL

Over the years, the Congress has evolved a body of legislation establishing the Federal interest in civil works projects for many purposes. As a result of a number of authorizing acts, a considerable Federal program of such projects has been developed. However, many other problems and meritorious projects still await study and consideration. Continuing study and revision of the program in keeping with current and prospective needs are essential to sound regional and national development and to efficient use of the Nation's financial and natural resources. The projects contained in this bill are the results of such study, completed almost entirely since the authorization act of July 14, 1960. The bill is necessary to provide authorization for their undertaking, and for effective continuing undertaking of certain comprehensive river basin plans and programs previously authorized by the Congress.

The committee urges passage of this bill.

### SUMMARY AND ANALYSIS OF THE BILL

#### *Monetary summary of bill*

#### TITLE I

	Number	Amount
Navigation projects.....	71	\$406,930,000
Beach erosion.....	8	1,775,800
Total, title I.....	79	408,705,800

#### TITLE II

Projects.....	86	\$1,895,313,500
Basin authorization.....	1	3,700,000
Total, title II.....	87	1,899,013,500
Grand total.....	167	2,307,719,300

### ANALYSIS OF TITLE I

#### SECTION 101

This section summarizes the project authorizations for navigation and beach erosion control works in title I. The initial table lists the projects, project document numbers, and estimated Federal costs. Pertinent information follows for each project.

## TITLE I. RIVERS AND HARBORS

*Navigation projects*

Projects	Document No.	Federal cost of new work
Big Sandy River, Ky., lock and dam No. 3.....		\$200,000
Buffalo Harbor, N.Y.....	H. 451, 87th Cong.....	2,797,000
Buttermilk Channel, N.Y.....	H. 483, 87th Cong.....	2,226,000
Calcasieu River, La.....	H. 582, 87th Cong.....	3,310,000
Calumet Harbor and River, Ill. and Ind.....		11,464,000
Carvers Harbor, Maine.....	S. 118, 87th Cong.....	205,000
Caseville Harbor, Mich.....	H. 64, 87th Cong.....	327,000
Chelsea Harbor, Mass.....	H. 350, 87th Cong.....	2,843,000
Chicago Harbor, Ill.....	H. 485, 87th Cong.....	1,505,000
Cleveland Harbor, Ohio.....	H. 527, 87th Cong.....	888,000
Columbia and lower Willamette Rivers, Oreg.....	H. 203, 87th Cong.....	493,000
Columbia and lower Willamette Rivers below Vancouver, Wash. and Oreg.....	H. 452, 87th Cong.....	20,100,000
Conneaut Harbor, Ohio.....	H. 415, 87th Cong.....	6,179,000
Dana Point, Calif.....	H. 532, 87th Cong.....	3,730,000
Dorchester Bay and Neponset River, Mass.....	S. 126, 87th Cong.....	7,050,000
Erie Harbor, Pa.....	H. 340, 87th Cong.....	671,000
Flushing Bay and Creek, N.Y.....	H. 551, 87th Cong.....	1,695,000
Gladstone Harbor and Kipling, Mich.....	H. 480, 87th Cong.....	350,000
Gloucester Harbor, Mass.....	H. 341, 87th Cong.....	1,100,000
Great Sodus Bay Harbor, N.Y.....	H. 138, 87th Cong.....	765,000
Green Bay Harbor, Wis.....	H. 470, 87th Cong.....	4,270,000
Gulf Intracoastal Waterway, channel to Palacios, Tex.....	H. 504, 87th Cong.....	818,000
Gulf Intracoastal Waterway, channel to Victoria, Tex.....	H. 288, 87th Cong.....	1,590,000
Gulf Intracoastal Waterway, Louisiana and Texas section.....	H. —, 87th Cong.....	25,540,000
Holt lock and dam, Alabama.....		
Huron Harbor, Ohio.....	H. 165, 87th Cong.....	8,557,000
Illinois Waterway, Ill. and Ind.....	H. 31, 86th Cong.....	114,652,000
Kaskaskia River, Ill.....	S. 44, 87th Cong.....	58,200,000
Kaunakakai Harbor, Hawaii.....	H. 484, 87th Cong.....	7,919,000
Kennebunk River, Maine.....	H. 459, 87th Cong.....	270,000
Kenosha Harbor, Wis.....	H. 496, 87th Cong.....	673,000
Key West Harbor, Fla.....	S. 106, 87th Cong.....	820,000
Leland Harbor, Mich.....	H. 413, 87th Cong.....	485,000
Little Neck Bay, N.Y.....	H. 510, 87th Cong.....	2,185,000
Lynnhaven Inlet Bay, Va.....	H. —, 87th Cong.....	1,068,000
Manitowoc Harbor, Wis.....	H. 479, 87th Cong.....	719,000
Marblehead Harbor, Mass.....	H. 516, 87th Cong.....	1,752,000
Milwaukee Harbor, Wis.....	H. 134, 87th Cong.....	4,029,000
Mississippi River, Baton Rouge to Gulf of Mexico.....	S. 36, 87th Cong.....	357,000
Mississippi River, Clarksville, Mo.....	H. 552, 87th Cong.....	103,300
Mississippi River between Missouri River and Minneapolis, Minn.....	H. 513, 87th Cong.....	1,205,000
Muskegon Harbor, Mich.....	H. 474, 87th Cong.....	609,000
Narraguagus Harbor, Maine.....	H. 530, 87th Cong.....	500,000
Newark Bay, Hackensack and Passaic Rivers, N.J.....		
New Buffalo Harbor, Mich.....	H. 481, 87th Cong.....	667,000
Noyo River and Harbor, Calif.....	S. 121, 87th Cong.....	13,231,000
Oakland Harbor, Calif.....	H. 353, 87th Cong.....	6,775,000
Oakland Harbor, Fruitvale Avenue Bridge, Calif.....	S. 75, 87th Cong.....	1,750,000
Ontonagon Harbor, Mich.....	H. 287, 87th Cong.....	4,741,000
Oswego Harbor, N.Y.....	H. 471, 87th Cong.....	1,180,000
Pascagoula Harbor, Miss.....	H. 560, 87th Cong.....	4,870,000
Pawtuxet Cove, R.I.....	H. 236, 87th Cong.....	210,000
Pensacola Harbor, Fla.....	H. 528, 87th Cong.....	424,000
Plymouth Harbor, Mass.....	S. 124, 87th Cong.....	1,200,000
Portland Harbor, Maine.....	H. 216, 87th Cong.....	8,340,000
Portsmouth Harbor, N.H. and Maine.....	H. 482, 87th Cong.....	7,500,000
Port Sutton and Ybor Channel, Tampa Harbor, Fla.....	H. 529, 87th Cong.....	997,000
Puget Sound-Kingston Harbor, Wash.....	H. 417, 87th Cong.....	428,000
Raritan River, N.J.....	H. 455, 86th Cong.....	Maintenance
Rollinson Channel, N.C.....	H. 457, 87th Cong.....	652,000
Rouge River, Mich.....	H. 509, 87th Cong.....	257,000
Sabine Neches Waterway.....	H. 553, 87th Cong.....	20,830,000
Saginaw River, Mich.....	H. 544, 87th Cong.....	4,780,000
Sandy Slough, Mo.....	H. 419, 87th Cong.....	195,000
Santa Barbara Harbor, Calif.....	H. 518, 87th Cong.....	3,000,000
Savannah Harbor, Ga.....	S. 115, 87th Cong.....	605,000
Searsport Harbor, Maine.....	H. 500, 87th Cong.....	700,000
Swinomish Channel, Wash.....	H. 499, 87th Cong.....	887,000
Tacoma Harbor, Wash.....	S. 104, 87th Cong.....	2,460,000
Trinity River, Wallisville, Tex.....	H. 215, 87th Cong.....	9,162,000
Walter F. George lock and dam, Alabama and Georgia.....	S. 109, 87th Cong.....	500,000
Wilmington Harbor, N.C.....	S. 114, 87th Cong.....	6,370,000
Total.....		406,930,300



*Beach erosion projects*

Projects	Document No.	Federal cost of new work
Fire Island Inlet and shore westerly to Jones Inlet, Long Island, N. Y.		
Fort Macon-Atlantic Beach, N. C.	H. —, 87th Cong.	\$194,000
Ohio shore of Lake Erie:		
Marblehead, Ohio	H. 63, 87th Cong.	658,500
Sheffield Lake	H. 414, 87th Cong.	100,300
Shore of New Hampshire	H. 416, 87th Cong.	88,000
Ventura-Pierpont area, California	H. 458, 87th Cong.	515,000
Virginia Beach, Va.	H. 382, 87th Cong.	(1)
Virginia and Biscayne Keys, Fla.	H. 561, 87th Cong.	220,000
Total		1,775,800

<sup>1</sup> Periodic nourishment.

## NARRAGUAGUS RIVER, MAINE

(H. Doc. 530, 87th Cong.)

*Location.*—In northeastern Maine about 35 miles east of Bangor.

*Authority.*—House Public Works Committee resolution adopted June 27, 1956.

*Existing project.*—Provides for a channel 200 feet wide and 11 feet deep from deep water in the bay to the original location of lower steamboat wharf, thence 9 feet deep to the anchorage known as Deep Hole, a total distance of 1.5 miles.

*Navigation problem.*—The present shallow depths hamper movement of loaded fishing craft to the canneries and there is a need for sheltered anchorage areas in the locality.

*Recommended plan of improvement.*—Provides for a channel 11 feet deep and 150 feet wide from deep water in Narraguagus Bay to Wyman; thence 9 feet deep and 100 feet wide to Milbridge, with widening opposite Milbridge for an anchorage; and thence 6 feet deep and 100 feet wide to the proposed town landing downstream from the highway bridge, with widening near the landing for an anchorage.

*Estimated cost (price level of March 1962).*—

Federal	\$500,000
Non-Federal	5,000
Total	505,000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization	\$14,400	\$300	\$14,700
Maintenance	7,900		7,900
Total	22,300	300	22,600
Annual benefits:			
Increased fish catch			14,400
Reduced fish spoilage			21,600
Total			36,000

*Benefit-cost ratio.*—1.6.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for initial dredging and subsequent maintenance of the improvement and for aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil, and also necessary retaining dikes, bulkheads, and embankments therefor or the costs of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvements; provide and maintain without cost to the United States a suitable public landing at Milbridge with adequate supply facilities open to all on equal terms, in accordance with plans approved by the Chief of Engineers; and provide and maintain without cost to the United States adequate docking facilities at the terminals, including depths in berthing areas commensurate with the related project depths. They have indicated willingness to meet the requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Maine: Favorable.

*Comments of the Bureau of the Budget.*—No objections.

#### CARVERS HARBOR, VINALHAVEN, MAINE

(S. Doc. 118, 87th Cong.)

*Location.*—On the southwest side of Vinalhaven Island at the mouth of Penobscot Bay, about 15 miles southeast of Rockland, Maine.

*Authority.*—House Public Works Committee resolution adopted January 18, 1949.

*Existing project.*—Consist of dredging to a depth of 16 feet an area of 23 acres in the central part of the inner harbor; and to a depth of 10 feet two adjoining areas on the southeast, totaling 7 acres.

*Navigation problem.*—The principal difficulties are the maneuvering and docking of boats in the harbor at low tide.

*Recommended plan of improvement.*—Provides for deepening to 10 feet the area extending northwest from the present 23-acre anchorage to a line generally 50 feet from the existing wharves; and a channel 6 feet deep from the anchorage extension to the northeast part of the harbor, 75 feet wide for a distance of 325 feet, thence increasing to a width of 150 feet for a distance of 175 feet to form a basin.

*Estimated cost (price level of February 1962).*—

Federal.....	\$205, 000
Non-Federal.....	-----

Total.....	205, 000
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*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$6, 100	-----	\$6, 100
Maintenance.....	1, 200	-----	1, 200
Total.....	7, 300	-----	7, 300
Annual benefits: Transportation savings.....	-----	-----	16, 100

*Benefit-cost ratio.*—2.2.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for initial dredging and subsequent maintenance of the improvement upon the request of the Chief of Engineers, including suitable areas as may be determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil, and also necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvement; provide and maintain without cost to the United States depths in berthing areas and local access channels serving the terminals commensurate with the depths provided in the related project areas; and provide and maintain without cost to the United States a suitable public landing at the northeast end of the harbor open to all on equal terms and with adequate supply facilities and access to the dredged channel, in accordance with plans approved by the Chief of Engineers.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Maine: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### SEARSPORT HARBOR, MAINE

(H. Doc. 500, 87th Cong.)

*Location.*—On the west side of Penobscot Bay about 30 miles from the entrance.

*Authority.*—House Public Works Committee resolution adopted June 3, 1959.

*Existing project.*—There is no existing Federal project at Searsport Harbor.

*Navigation problem.*—Shallow approach depths and limited turning areas of adequate depth require that larger vessels proceed to their berths at high tide and limit the size of vessels that may use the port.

*Recommended plan of improvement.*—Provides for the construction of an access channel 500 feet wide, 35 feet deep to the deepwater piers at Mack Point, Searsport Harbor, Maine, with a turning basin of the same depth and a maximum width of 1,500 feet.

*Estimated cost (price level of March 1962).*—

Federal.....	\$700, 000
Non-Federal.....	
Total.....	700, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$20, 300		\$20, 300
Maintenance.....	6, 200		6, 200
Total.....	26, 500		26, 500
Annual benefits: Transportation savings.....			474, 000



*Benefit-cost ratio.*—17.9.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project, and for construction and maintenance of aids to navigation, on request of the Chief of Engineers; hold and save the United States free from damages due to the construction and maintenance of the improvements; and provide and maintain without cost to the United States depths commensurate with the project depth in the berths and berth access channels of the two deep-draft wharves.

*Comments of the State and Federal Agencies.*—

Department of the Interior: Favorable.

State of Maine: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

PORTLAND HARBOR, MAINE

(H. Doc. 216, 87th Cong.)

*Location.*—Portland Harbor is at the southwest end of Casco Bay on the Maine coast, 100 miles northeast of Boston, Mass.

*Authority.*—House Public Works Committee resolution adopted August 20, 1957.

*Existing project.*—The Federal navigation project provides for two anchorages, one 35 feet deep northwest of House Island, the other 30 feet deep east of the city; a channel 35 feet deep from the sea to the Boston & Maine Railroad Bridge with a turning basin 35 feet deep; a channel 30 feet deep from the anchorage of that depth to the mouth of Back Cove, thence 14 and 12 feet deep within the cove; removal of obstructing rock ledges from the 40-foot channel; a breakwater 900 feet long at Spring Point, and one 2,000 feet long south of the inner harbor entrance; and maintenance of Soldier Ledge Channel in Hussey Sound to a depth of 40 feet.

*Navigation problem.*—Existing shoals in the outer harbor seriously restrict, or prevent, maneuvering of large tankers, and existing harbor depths are inadequate.

*Recommended plan of improvement.*—Modification of the existing project provides for an entrance channel 1,000 feet wide and 45 feet deep, from deep water in Casco Bay to a line about opposite Fort Gorges, and for a 45-foot depth in the House Island anchorage.

*Estimated cost (September 1960 price level).*—

Federal.....	\$8, 340, 000
Non-Federal.....	0
Total.....	8, 340, 000

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$303, 700	-----	\$303, 700
Increased maintenance.....	4, 100	-----	4, 100
Total.....	307, 800	-----	307, 800
<b>Annual benefits:</b>			
Transportation savings.....	-----	-----	1, 464, 000
Elimination of tidal delays.....	-----	-----	366, 700
Total.....	-----	-----	1, 830, 700

*Benefit-cost ratio.*—6.0.

*Local cooperation.*—Requires that local interests agree to, hold, and save the United States free from damages due to construction and subsequent maintenance, and provide all lands, easements, and rights-of-way required including spoil-disposal areas and bulkheads, dikes, and embankments necessary thereto. Local interests have indicated willingness to cooperate in the desired improvements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Maine: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget has no objection; however, they consider that, if the project is authorized by Congress, funds to initiate construction should be requested only upon a determination that the economic justification for the project is not significantly impaired in light of Canadian oil policy as it may appear at that time.

*Remarks.*—The committee believes that the project should be authorized at this time.

#### KENNEBUNK RIVER, MAINE

(H. Doc. 459, 87th Cong.)

*Location.*—The Kennebunk River is located in southwestern Maine and discharges into the Atlantic Ocean about 30 miles southwest of Portland.

*Authority.*—Resolution, House Public Works Committee, adopted June 3, 1959.

*Existing project.*—Provides for a channel 4 feet deep, 100 feet wide, and about 1 mile long from the ocean to Kennebunkport; three stone jetties, one 550 feet long on the east side of the river mouth, another 290 feet long on the west side, and a third of no specified length on the east bank.

*Navigation problem.*—Inadequate depths and insufficient anchorage areas result in lost fishing time and boat damage to the existing fishing and pleasure boat fleet.

*Recommended plan of improvement.*—A channel 8 feet deep and 100 feet wide, extending 1,700 feet from deep water to the town landing, thence 6 feet depth over a width of 100 feet for a distance of 2,300 feet, and a width of 75 feet for the remaining 2,000 feet to the project limit; an anchorage, 4 acres in area, on the west side of the channel, and an anchorage 2 acres in area on the east side, each 6 feet deep; and extension of the west jetty by about 300 feet, supplemented by construction of a sand fence.

*Estimated cost (price level of September 1961).—*

Federal.....	\$270, 000
Non-Federal.....	90, 000
<b>Total.....</b>	<b>360, 000</b>

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$8, 000	\$3, 250	\$11, 250
Maintenance.....	4, 300		4, 300
<b>Total.....</b>	<b>12, 300</b>	<b>3, 250</b>	<b>15, 550</b>
<b>Annual benefits:</b>			
Damages prevented.....			3, 800
Commercial fishing.....			29, 830
Recreational boating.....			27, 230
<b>Total.....</b>			<b>60, 860</b>

*Benefit-cost ratio.—3.9.*

*Local cooperation.*—Contribute in cash 25 percent of the first cost of construction due to recreational boating benefits, such contribution presently estimated at \$90,000, to be paid in a lump sum prior to initiation of construction, subject to final adjustment after actual costs have been determined; provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the improvements and for aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the costs of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvements; and improve and maintain the existing public landing, including access to the dredged channel, open to all on equal terms. Local interests have expressed a willingness to meet the requirements of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

State of Maine: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## PORTSMOUTH HARBOR AND PISCATAQUA RIVER, MAINE AND N.H.

(H. Doc. 482, 87th Cong.)

*Location.*—Portsmouth Harbor is located 45 miles northeast of Boston Harbor and 37 miles southwest of Portland Harbor at the mouth of the Piscataqua River. The river is about 13 miles long and forms a portion of the boundary of the States of Maine and New Hampshire.

*Authority.*—The report is in partial response to resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on November 18, 1958, and June 3, 1959, respectively.

*Existing project.*—The existing project for Portsmouth Harbor and Piscataqua River, Maine and N.H., completed in 1956, provides for



the removal of ledge rock areas in the vicinity of Gangway Rock, southwest point of Badgers Island, and Boiling Rock to a depth of 35 feet.

*Navigation problem.*—High velocity current flows and a tortuous channel with sharp bends and submerged ledges makes navigation for deep-draft vessels hazardous.

*Recommended plan of improvement.*—Provides for improvement of the river channel from Henderson Point to Newington by widening and deepening to 35 feet below mean low water the bends at Henderson Point, Gangway Rock, and the southwesterly point of Badgers Island; widening the channel between Badgers Island and Nobles Island; widening the bend east of the Maine-New Hampshire interstate bridge to provide a better approach to the bridge; removing the 26-foot shoal at the south edge of the channel west of the Maine-New Hampshire interstate bridge; widening the bend at Boiling Rock including removal of the pinnacle of Boiling Rock; providing a 950-foot-wide turning basin immediately upstream; and improving the channel from Boiling Rock to Newington to a depth of 35 feet, generally 400 feet wide, and providing a turning basin 850 feet wide by dredging shoals.

*Estimated cost (price level of January 1962).*—

Federal.....	\$7, 500, 000
Non-Federal.....	0
Total.....	7, 500, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$214, 000	0	\$214, 000
Maintenance dredging.....	10, 000		10, 000
Maintenance on navigation aids.....	600		600
Total.....	224, 600		224, 600
Annual benefits: Savings in transportation costs.....			482, 000
Total.....			482, 000

*Benefit-cost ratio.*—2.1.

*Local cooperation.*—Hold and save the United States free from damages due to the construction and maintenance of the improvements; provide all lands, easements, and rights-of-way necessary for the construction and subsequent maintenance of the project and for aids to navigation upon the request of the Chief of Engineers; and provide and maintain without cost to the United States depths in berthing areas and local access channels serving the terminals commensurate with the depths provided in the related project areas. Local interests have agreed to furnish the required items of local cooperation.

*Comments of the States and Federal Agencies.*—

Department of the Interior: Favorable.

State of Maine: Favorable.

State of New Hampshire: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## GLOUCESTER HARBOR, MASS.

(H. Doc. 341, 87th Cong.)

*Location.*—Gloucester Harbor, Mass., is at the southern end of Cape Ann, about 25 miles northeast of Boston Harbor.

*Authority.*—Two similar resolutions adopted by the Committee on Public Works of the House of Representatives on March 30, 1955.

*Existing project.*—Provides in general for a rubblestone breakwater 2,250 feet long; removal of three ledges in the inner harbor and five ledges in the outer harbor; removal, to a depth of 15 feet, of ledges and boulders obstructing the approach to the wharves; and dredging, to 15 feet below mean low water, of the channel leading past the wharves; and dredging Harbor Cove to a depth of 10 feet at mean low water. It also provides for an 8-foot channel through Annisquam River.

*Navigation problem.*—Greater channel dimensions and the removal of rock obstructions are needed for safe navigation. Additional anchorage areas also are needed.

*Recommended plan of improvement.*—Provides for an entrance channel into the inner harbor, 300 feet wide and 20 feet deep, with a turning basin 600 feet wide; an access channel, 200 to 250 feet wide and 20 feet deep, along the waterfront to the northwest of the Gloucester fish pier; an access channel, 200 feet wide and 20 feet deep, along the waterfront southeast of the Gloucester fish pier; an access channel, 650 to 300 feet wide and 16 feet deep extending into Smith Cove; an access channel varying from 500 to 100 feet wide and 18 feet deep, along the waterfront west of Harbor Cove and into Harbor Cove; an anchorage of about 5 acres, 15 feet deep, east of the entrance to Harbor Cove; an anchorage of about 10 acres, 16 feet deep, opposite the entrance to Smith Cove; and removal of the isolated rock shoal adjacent to the entrance channel south of Harbor Cove, to a depth of 24 feet.

*Estimated cost (price level of November 1960).*—

Federal.....	\$1, 100, 000
Non-Federal.....	0
Total.....	1, 100, 000

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$40, 700	0	\$40, 700
Increased maintenance.....	14, 300	0	14, 300
Total.....	55, 000	0	55, 000
<b>Annual benefits:</b>			
Damages prevented.....			14, 000
Elimination of tidal delays.....			133, 600
Total.....			147, 000

*Benefit-cost ratio.*—2.7.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for construction of the project, and for construction and maintenance of aids to navigation, upon the request of the Chief of Engineers; hold and save the United States free from damages due to the construction works; provide and maintain depths in berthing areas and local access channels, commensurate with the depths provided in the related project areas; and provided further that, if it is determined in detailed studies that spoil-disposal areas are needed, local interests agree to furnish, upon request of the Chief of Engineers, and without cost to the United States, any such areas required including such dikes, bulkheads, and embankments as may be necessary for the initial dredging and subsequent maintenance. Local interests are willing to provide the items of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Massachusetts: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### MARBLEHEAD HARBOR, MASS.

(H. Doc. 516, 87th Cong.)

*Location.*—North of Boston about halfway between Boston and Gloucester, Mass.

*Authority.*—House Public Works Committee resolution adopted June 2, 1949.

*Existing project.*—The Federal navigation project provides for a 13-acre anchorage area 20 feet deep; a 16-acre anchorage area 9 feet deep; and repair to the seawall.

*Navigation problem.*—There is a need for additional anchorage area and greater protection for present and future fleets using the harbor.

*Recommended plan of improvement.*—Provides for construction of a stone breakwater 1,200 feet long and that the existing project be abandoned.

*Estimated cost (price level of July 1961).*—

Federal.....	\$1, 752, 000
Non-Federal.....	648, 000
Total.....	2, 400, 000

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and mortization.....	\$50, 140	\$23, 460	\$73, 600
Maintenance and operation.....	18, 750		18, 750
Total.....	68, 890	23, 460	92, 350
<b>Annual benefits:</b>			
Commercial fishing.....			56, 400
Recreational boating.....			66, 100
Total.....			122, 500

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Contribute in cash 27 percent of the first cost of construction due to benefits to recreational boating, such contribution



presently estimated at \$648,000 to be paid in a lump sum prior to initiation of construction, subject to final adjustment after actual costs have been determined; provide without cost to the United States all lands, easements, and rights-of-way necessary for construction and maintenance of the project when and as required, including access for a contractor and his equipment to construct the breakwater from land; hold and save the United States free from damages that may result from construction and subsequent maintenance of the project; and provide assurances that the existing public landings or their equivalent will be adequately maintained during the life of the project and will be open to all on equal terms. Local interests have provided assurances that the requirements of local cooperation will be met.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Massachusetts: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### CHELSEA RIVER (BOSTON HARBOR), MASS.

(H. Doc. 350, 87th Cong.)

*Location.*—Chelsea River is a coastal stream emptying into Boston Harbor, Mass.

*Authority.*—Resolution of the Public Works Committee, U.S. House of Representatives, adopted February 1, 1946.

*Existing project.*—The Federal navigation project consists of a channel 30 feet deep and generally 200 feet wide from the mouth of the river, upstream for a distance of 2.0 miles; thence 8.4 feet deep and 150 feet wide for a distance of 0.5 mile to the head of navigation.

*Navigation problem.*—Inadequate depths make navigation hazardous and result in delays to deep-draft commercial traffic using the harbor.

*Recommended plan of improvement.*—Provides for a channel in Chelsea River 35 feet deep from the Boston Harbor main ship channel to the Chelsea Street Bridge generally 225 to 250 feet in width; a channel 35 feet deep varying in width from 250 to 430 feet above the Chelsea Street Bridge; a maneuvering basin 35 feet deep with 800 feet average width and 1,000 feet average length; and deauthorization of the 30- and 8.4-foot channels lying in the waterway outside the presently recommended 35-foot project limits for Chelsea River.

*Estimated cost (price level of July 1960).*—

Federal.....	\$2, 843, 000
Non-Federal.....	2, 140, 000
Total.....	4, 983, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$103, 400	\$91, 200	\$194, 600
Maintenance and operation.....	2, 500		2, 500
Total.....	105, 900	91, 200	197, 100
Annual benefits:			
Transportation savings.....			531, 350
Towboat savings.....			66, 900
Reduction in tidal delays.....			184, 000
Total.....			782, 250

*Benefit-cost ratio.*—4.0.

*Local cooperation.*—Provide lands, easements and rights-of-way required for construction of the project; hold and save the United States free from damages due to construction and maintenance; provide and maintain berthing areas; relocate Northeast Petroleum Corp. wharf as needed; and accomplish alterations in gas siphon, water tunnel, submarine cable, and other utilities as needed. Local interests have indicated willingness to cooperate.

*Comments of the State and Federal Agencies.*—

Department of the Interior: Favorable.

State of Massachusetts: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### DORCHESTER BAY AND NEPONSET RIVER, MASS.

(S. Doc. 126, 87th Cong.)

*Location.*—Dorchester Bay and Neponset River are located in the southern part of Boston Harbor.

*Authority.*—Senate Committee on Public Works Resolution adopted October 15, 1957.

*Existing project.*—The Federal project provides for a channel 18 feet deep and 175 feet wide from the main ship channel to Commercial Point, and 15 feet deep and 100 feet wide in Neponset River to the Neponset Highway Bridge.

*Navigation problem.*—Proposed steam-electric plant of Boston Edison Co. at Squantum Point depends upon 35-foot depth channel and appropriate turning basin.

*Recommended plan of improvement.*—Provide a channel 35 feet deep and 300 feet wide from the Boston Harbor to the vicinity of Squantum Point, with a turning basin of the same depth.

*Estimated cost (1961 price level).*—

Federal.....	\$7, 050, 000
Non-Federal.....	315, 000
Total.....	7, 365, 000

*Project economics (100 year analysis basis).*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$201, 000	\$12, 800	\$213, 800
Maintenance and operation.....	10, 000		10, 000
Aids to navigation.....	1, 000		1, 000
Total.....	212, 000	12, 800	224, 800
Annual benefits: Savings in oil costs.....			659, 600

*Benefit-cost ratio.*—2.9.

*Local cooperation.*—Construct the first 250,000-kilowatt unit of the proposed powerplant; provide all lands, easements, and rights-of-way needed for the project; provide an approach channel and berth with depths commensurate with recommended project; and hold and save the United States free from damages.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

State of Massachusetts: Favorable.

*Comments of the Bureau of the Budget.*—No objection subject to the understanding that, prior to a request for funds to initiate construction of the project, if authorized, more definite evidence be presented to show that other industries would utilize the deep-draft channel, in order to assure that Federal funds are not expended solely for the benefit of a single user.

PLYMOUTH HARBOR, MASS.

(S. Doc. 124, 87th Cong.)

*Location.*—On the coast of Massachusetts about 45 miles south of Boston.

*Authority.*—Senate Public Works Committee resolution adopted April 20, 1948.

*Existing project.*—Existing Federal navigation project provides for an 18-foot channel from deep water to the State pier, a distance of about 2.5 miles; a channel 15 feet deep from the State pier for a distance of 0.3 mile terminating in a 300-square-foot turning basin of the same depth; an 18-foot anchorage adjacent to the 18-foot channel; maintenance of the area in the vicinity of the State pier dredged by Commonwealth; and riprap protection for sections of Long Beach and restoration of Eel River to its former course. Local interests have provided various navigation and waterfront improvements.

*Navigation problem.*—There is a need for additional anchorage area and greater protection for present and future fleets using Plymouth Harbor.

*Recommended plan of improvement.*—Provides for a rubble-stone breakwater extending 1,400 feet easterly from a point north of the town wharf, and thence southeasterly for a distance of 2,100 feet; an anchorage 8 feet deep and 60 acres in area inside the breakwater; and elimination of the authorized 18-foot anchorage from the existing project.

*Estimated cost (price level of July 1961).*—

Federal.....	\$1, 200, 000
Non-Federal.....	300, 000
<b>Total.....</b>	<b>1, 500, 000</b>

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$43, 880	\$12, 800	\$56, 680
Maintenance.....	10, 000		10, 000
Maintenance, navigation aids.....	120		120
<b>Total.....</b>	<b>54, 00</b>	<b>12, 800</b>	<b>66, 800</b>
<b>Annual benefits:</b>			
Storm damages prevented.....			12, 000
Commercial fishing.....			68, 800
Recreational boating.....			41, 000
<b>Total.....</b>			<b>121, 800</b>

*Benefit-cost ratio.*—1.8.

*Local cooperation.*—Contribute in cash 20 percent of the first cost of construction due to benefits to recreational boating, such contribu-



tion, presently estimated at \$300,000, to be paid in a lump sum prior to initiation of construction, subject to final adjustment after actual costs have been determined; maintain existing public landings open to all on equal terms and provide without cost to the United States all necessary mooring facilities in the anchorage; provide without cost to the United States all lands, easements, and rights-of-way necessary for construction and subsequent maintenance of the project and of aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; and hold and save the United States free from damages due to the construction and subsequent maintenance of the project. Local interests have provided assurances that the requirements of local cooperation will be met.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Commonwealth of Massachusetts: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### PAWTUXET COVE, R.I.

(H. Doc. 236, 87th Cong.)

*Location.*—At the mouth of the Pawtuxet River, a tributary of the Providence River which empties into Narragansett Bay.

*Authority.*—Resolution by the House Public Works Committee adopted April 5, 1949.

*Existing Project.*—No Federal project.

*Navigation problem.*—Navigation is hampered by shallow depths in the entrance channel and in the channel inside the cove. There is no available anchorage area where boats can moor without grounding at low tide. Boat damages result due to these conditions.

*Recommended plan of improvement.*—A channel 100 feet wide and 6 feet deep from deep water to the head of the cove, with a turning basin near the upper end; and an anchorage of about 14 acres, 6 feet deep, south of the entrance channel, with a sheltering dike, 2,200 feet long, constructed to 12 feet above mean low water, on the east side of the anchorage.

*Estimated cost (price level of August 1960).*—

Federal.....	\$210, 000
Non-Federal.....	210, 000
<b>Total.....</b>	<b>420, 000</b>

#### *Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$8, 300	\$9, 000	\$17, 300
Maintenance.....	8, 400		8, 400
<b>Total.....</b>	<b>16, 700</b>	<b>9, 000</b>	<b>25, 700</b>
<b>Annual benefits:</b>			
Damages prevented.....			1, 200
Small-boat harbor.....			25, 000
Land fill.....			2, 000
<b>Total.....</b>			<b>38, 200</b>

*Benefit-cost ratio.*—1.5.

*Local cooperation.*—Contribute in cash 50 percent of the first cost of construction of the general navigation facilities, such contribution, presently estimated at \$210,000, to be paid in a lump sum prior to initiation of construction, subject to final adjustment after actual costs have been determined; provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil and necessary retaining dikes, bulkheads and embankments therefor or the costs of such retaining works; hold and save the United States free from damages due to the construction and maintenance of the project; provide and maintain without cost to the United States necessary mooring facilities and utilities, including two public landings with suitable supply facilities, open to all on equal terms; regulate the use of the harbor facilities with the understanding that the facilities will be open to all on equal terms; and, remove or relocate locally constructed navigation aids. Local interests are willing to meet the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Rhode Island: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### LITTLE NECK BAY, N.Y.

(H. Doc. 510, 87th Cong.)

*Location.*—Little Neck Bay is on the north shore of Long Island at the westerly end of Long Island Sound, about 17 miles northeast of the Battery, New York City.

*Authority.*—Resolutions of the Public Works Committees of the Senate and House of Representatives adopted November 14, 1957, and July 16, 1958, respectively.

*Existing project.*—There are no Federal improvements for navigation in the bay.

*Navigation problem.*—Difficulties arise from insufficient depth in the southerly part of the bay. Larger vessels are forced to moor in less sheltered areas.

*Recommended plan of improvement.*—Provide improvement by dredging to a depth of 7 feet an area of 350 acres in the southern part of the bay, and dredging an entrance channel thereto, 200 feet wide and 7 feet deep, from deep water to the north.

*Estimated cost (price level January 1961).*—

Federal.....	\$2, 185, 000
Non-Federal.....	2, 185, 000
<b>Total.....</b>	<b>4, 370, 000</b>

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$79,600	\$101,700	\$181,300
Maintenance.....	44,000		44,000
Navigation aids.....	200		200
Total.....	123,800	101,700	225,500
Annual benefits:			
Recreational benefits.....			394,000
Reduction of damages.....			10,000
Total.....			404,000

*Benefit-cost ratio.*—1.8.

*Local cooperation.*—Contribute in cash 50 percent of the first cost of construction due to recreational boating benefits, presently estimated at \$2,185,000, to be paid in a lump sum prior to initiation of construction; provide without cost to the United States all lands, easements, and rights-of-way required for construction of the project; hold and save the United States free from damages; provide and maintain without cost to the United States necessary mooring facilities and utilities including public landings with suitable supply facilities and public parking areas open to all on equal terms; and establish a competent and properly constituted public body to regulate the harbor facilities, open to all on equal terms. The city of New York has indicated willingness and ability to meet the requirements of local cooperation.

*Comments of the State and Federal Agencies.*—

Department of the Interior: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of New York: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### FLUSHING BAY AND CREEK, N.Y.

(H. Doc. 551, 87th Cong.)

*Location.*—Flushing Bay is on the north shore of Long Island, opening into the East River, 12 miles northeast of the Battery.

*Authority.*—Resolution by the Committee on Public Works of the House of Representatives, United States, adopted on June 7, 1961.

*Existing project.*—Provides for a channel 12 feet deep from East River through Flushing Bay and in Flushing Creek to Main Street Bridge with widths varying from 160 to 200 feet; a branch channel 12 feet deep and 200 feet wide from the bay channel to a maneuvering area of the same depth outside the municipal boat basin at the south end of the bay, with an anchorage basin 8 feet deep and approximately 700 feet wide west of the branch channel; and for the repair and reconstruction of 3,739 feet of dike. The work remaining to be done under the existing project consists of deepening the channel in the creek to 12 feet and the repair and reconstruction of the dike.

*Navigation problem.*—Existing project is inadequate for existing and prospective recreational craft, excursion boats, and commercial barge traffic.



*Recommended plan of improvement.*—Provides for: a bay channel 15 feet deep and 300 feet wide from deep water in East River to the maneuvering area, a distance of 1.8 miles; a creek channel 15 feet deep and 200 feet wide to 170 feet at a point 50 feet downstream of the proposed Van Wyck Expressway Bridge, a distance of about 1.1 miles; a branch channel 15 feet deep and 200 feet wide from the bay channel about 0.1 mile to the maneuvering area; an irregularly shaped maneuvering area 2,000 by 750 feet with a depth of 15 feet, except the approach to the west side of the municipal boat basin which would remain at 12 feet deep; an anchorage basin about 2,100 by 1,800 feet with a depth of 6 feet; a steel sheet-pile breakwater on the east side of the anchorage, west of the remains of the existing dike, 1,400 feet long with a top elevation of 15 feet; abandonment of the portion of the creek channel of the existing project from Van Wyck Expressway Bridge to the Main Street Bridge, a distance of 0.3 mile; abandonment of the repair and reconstruction of the remainder of the existing dike; and completion of the existing project primarily in the creek channel to authorized depth of 12 feet. The uncompleted part of the work authorized in 1925 is recommended be combined with the additional work recommended herein and the whole be treated as a single item.

*Estimated cost (price level of January 1962).*—

	Existing project	Modification	Total
Federal.....	\$622,000	<sup>1</sup> \$1,695,000	\$2,317,000
Non-Federal.....	295,000	2,189,000	2,484,000
Total.....	917,000	3,884,000	4,801,000

<sup>1</sup> Amount of additional authorization required.

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$85,000	\$115,700	\$200,700
Maintenance.....	54,100	2,000	56,100
Total.....	139,100	117,700	256,800
Annual benefits:			
Transportation savings.....			211,200
Recreational boating.....			625,800
Harbor of refuge.....			5,000
Total.....			842,000

*Benefit-cost ratio.*—3.3.

*Local cooperation.*—Provides that prior to construction local interests contribute 50 percent of the first cost of construction for widening the bay channel from 200 to 300 feet, a distance of 1.8 miles, for dredging the recreational anchorage and for constructing the breakwater, presently estimated at \$1,154,000, the final amount to be determined after final costs are known; and provided that prior to construction local interests agree to provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and for aids to navigation upon the request of the Chief of Engineers; hold and

save the United States free from damages that may result from the construction and maintenance of the improvement; provide and maintain without cost to the United States adequate approach channels and berths and modify existing facilities at the terminals which would permit use of the waterway to secure full advantage of the deeper channel; accomplish without cost to the United States removal or relocation of pipelines, cables, and other utilities, and all necessary protective measures to bridges and other structures adjacent to or crossing the waterway; provide and maintain without cost to the United States necessary mooring facilities and utilities for recreational boating including public landings with suitable supply facilities and public automobile parking areas open to all on equal terms; and assign to a competent and properly constituted public body the power to regulate the use, growth, and free development of the waterway facilities with the understanding that said facilities will be open to all on equal terms. Local interests have indicated willingness and ability to furnish local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of New York: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### BUTTERMILK CHANNEL, N.Y.

(H. Doc. 483, 87th Cong.)

*Location.*—Buttermilk Channel is part of the New York Harbor joining Red Hook and Bay Ridge Channels to form a continuous deep-draft waterway along the Brooklyn waterfront.

*Authority.*—House Public Works Committee resolution adopted August 20, 1957.

*Existing project.*—The existing Federal project for Buttermilk Channel provides for a 40-foot channel over the easterly half and a 35-foot channel over the westerly half, for suitable widening at the junctions with East River and Red Hook and Anchorage Channels. Private and municipal interests have made intensive terminal and industrial improvements along the Brooklyn waterfront.

*Navigation problem.*—Navigation is unsafe and time consuming and widening is needed to alleviate difficult turns vessels must now make.

*Recommended Plan of Improvement.*—Provides for minimum clear width of 2,100 feet at the junction of Buttermilk Channel with Anchorage and Red Hook Channels; dredging to a project depth of 35 feet a triangular area on the north side of the Buttermilk Channel and an irregular area on the south side.

*Estimated cost (price level of July 1960).*—All Federal, \$2,226,000.

*Project economics.*—

#### Annual charges (all Federal):

Interest and amortization.....	\$81, 000
Maintenance.....	17, 000

Total.....	98, 000
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#### Annual benefits:

Damages prevented to vessels.....	12, 000
Savings in transportation.....	230, 000

Total.....	242, 000
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*Benefit-cost ratio.*—2.5.

*Local cooperation.*—None required.

*Comments of the State and Federal agencies.*—

Department of Interior: Favorable.

State of New York: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

NEWARK BAY, HACKENSACK AND PASSAIC RIVERS, N.J. (CHANNELS TO  
PORT ELIZABETH)

*Location.*—Newark Bay is an estuary extending southerly from the confluence of the Hackensack and Passaic Rivers to the New York and New Jersey channels. Hackensack River rises in Rockland County, N.Y., and flows generally south about 45 miles into Newark Bay. Passaic River rises in northeastern New Jersey and flows about 80 miles east and south into Newark Bay.

*Authority.*—Resolutions of the Public Works Committees of the U.S. Senate and House of Representatives adopted June 14, 1960 and July 31, 1957, respectively.

*Existing project.*—There is no existing Federal project for channels to Port Elizabeth on the west side of Newark Bay. The existing Federal project channels in Newark Bay, Hackensack and Passaic Rivers connect directly or indirectly with all major channels and water routes within the port of New York as well as all inland coastal and ocean routes served by the port. Approach from the Atlantic Ocean is afforded through Ambrose and Anchorage Channels which have controlling depths of 45 feet and the New York and New Jersey Channels which have controlling depths of 35 feet.

*Navigation flood problem.*—Local interests request that the channels to Port Elizabeth be incorporated in the Federal navigation project for Newark Bay, Hackensack and Passaic Rivers and assumption by the Federal Government of maintenance of the channels to Port Elizabeth.

*Recommended plan of improvement.*—Modification of the existing project for Newark, Hackensack and Passaic Rivers, N.J., to provide for Federal maintenance to a depth of 35 feet of the channels to Port Elizabeth which have been or are planned to be dredged by the Port of New York Authority or other responsible agency.

*Costs and project economics.*—Based on data in the district engineer's report there are no Federal construction costs for the project. Federal cost for maintenance of the channels is estimated at \$230,500 annually. Benefits, based on anticipated savings over a 50-year period have not been completely evaluated; however, since the commerce to the port is anticipated to exceed 8 million tons annually, savings in the order of 2½ cents per ton would be required for its justification. Benefits resulting from provision of the improvement are expected to exceed this figure. The studies made of this project to date indicate that the benefit-cost ratio will be in the order of 2 to 1.

*Status.*—The review report of the district engineer was submitted to the Board of Engineers for Rivers and Harbors for consideration in accordance with existing law. The Board returned the report to the reporting officers for reconsideration relative to the benefit analysis. Accordingly, the report has not been completed and reviewed in accordance with established procedures.



*Remarks.*—The committee has noted that maintenance of the general navigation channels to Port Elizabeth is needed to meet the growing needs of existing and prospective deep-draft commercial traffic moving into the port. Federal assumption of the maintenance cost is justified and is in keeping with that provided in similar projects throughout the Nation.

#### RARITAN RIVER, N.J.

(H. Doc. 455, 86th Cong.)

*Location.*—Raritan River is formed by the junction of its North and South Branches about 18 miles above New Brunswick, N.J., flows generally southeastward 30 miles to Raritan Bay, which is about 25 miles southwest of the Battery, New York City.

*Authority.*—Resolution, Committee on Rivers and Harbors, House of Representatives, adopted November 1945.

*Existing project.*—Provides for a depth of 25 feet and 300 feet wide in the main channel, together with various widths and depths to the Delaware and Raritan Canal entrance at New Brunswick; and a depth of 25 feet and 300 feet wide, together with varying widths and depths to the upper junction with the main channel at Crab Island.

*Navigation problem.*—Local interests desire the reconsideration of the item of local cooperation under the existing project regarding spoil disposal areas. They indicate that there has been a rapid decrease in available areas for that purpose.

*Recommended plan of improvement.*—Modification of the existing project for Raritan River, N.J., to provide for maintaining the South Channel to a depth of 15 feet from the upper limit of the 25-foot project to the dock of the Middlesex County Sewerage Authority, a distance of 2,200 feet.

*Estimated cost (price level of January 1959).*—

Federal: Maintenance only.

Non-Federal: None.

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$280	\$640	\$920
Maintenance.....	30,000	14,000	44,000
Total.....	30,280	14,640	44,920
Annual benefits: Transportation savings.....			180,200

*Benefit-cost ratio.*—4.0.

*Local cooperation.*—In addition to meeting requirements of local cooperation for the existing project; furnish spoil-disposal areas and necessary dikes, bulkheads and embankments therefor, required for maintenance of the improvement when and as required; and hold and save the United States free from damages due to maintenance of the improvement. Local interests have indicated willingness and ability to meet requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of New Jersey: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## LYNNHAVEN INLET, BAY, AND CONNECTING WATERS, VIRGINIA

(H. Doc. 580, 87th Cong.)

*Location.*—On the south shore of Chesapeake Bay, 5 miles west of Cape Henry, and 10 miles east of Norfolk, Va.

*Authority.*—Rivers and Harbors Act of 1945.

*Existing project.*—No Federal navigation project.

*Navigation problem.*—There is a need to improve the entrance and inner channels to accommodate existing and prospective commercial and recreational craft.

*Recommended plan of improvement.*—An entrance channel from Chesapeake Bay through Lynnhaven Inlet, 10 feet deep, 150 feet wide, and approximately 3,500 feet long; a mooring and turning basin in Lynnhaven Bay, 10 feet deep, 1,100 feet long, and 750 feet wide; a channel 9 feet deep, 90 feet wide, and approximately 10,000 feet long from the mooring and turning basin to Broad Bay via the Long Creek-Broad Bay Canal; and a channel through the Narrows, 6 feet deep, 90 feet wide, and approximately 2,000 feet long.

*Estimated cost (price level of January 1962).*

Federal.....	\$1, 147, 000
Non-Federal.....	312, 000
Total.....	1, 459, 000

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$52, 000	\$19, 800	\$71, 800
Maintenance.....	61, 500	2, 000	63, 500
Total.....	113, 500	21, 800	135, 300
<b>Annual benefits:</b>			
Increased oyster production.....			103, 000
Commercial boating.....			21, 400
Recreational boating.....			72, 200
Total.....			196, 600

*Benefit-cost ratio.*—1.5.

*Local cooperation.*—Contribute, in cash, 15 percent of the first cost of construction, such contribution presently estimated at \$203,000, to be paid in a lump sum prior to initiation of construction, subject to final adjustment after actual costs have been determined; provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the improvements and of aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; hold and save the United States free from property damages, including shellfish interests, that may result from construction and subsequent maintenance of the project; secure releases for damages from shellfish interests to permit the Corps of Engineers to accomplish the initial dredging and the subsequent maintenance of the project, when and as

required; provide and maintain, without cost to the United States, a marina for the use of recreational and sport-fishing craft, such facilities to include at least 400 feet of berthing space with adequate shore and water access thereto, and with such services as may be required for full utilization of the improvement by the public on equal terms; provide and maintain, without cost to the United States, a public terminal for commercial vessels, including those operated by commercial fishermen, oystermen, clammers, and crabbers, such facilities to include at least 300 feet of berthing space with adequate shore and water access thereto, and with such services as may be required for full utilization of the improvement by the public on equal terms; assure the control of pollution in the waters of Lynnhaven Bay and its eastern and western branches, Long Creek, Broad Bay, and Linkhorn Bay; and establish a competent and properly constituted public body empowered to regulate the use, growth, and free development of the harbor facilities with the understanding that said facilities will be open to all on equal terms.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Commonwealth of Virginia: Favorable.

*Comments of the Bureau of the Budget.*—No objection to submission of the report to Congress. However, due to the lack of policy clarification concerning principles to be developed on the basis of overall review of bridge replacement and clearance problems, the Bureau therefore recommends, without prejudice to reconsideration in the light of further policy clarification, that the proposed net cost to the Federal Government be reduced by \$79,000.

*Remarks.*—The committee notes the Bureau of the Budget's objection to crediting local interests for work already undertaken by them on the Long Creek-Broad Bay Canal highway bridge, and concurs therein. The authorization provides that nothing in this bill shall be construed as authorizing reimbursement to local interests for the Long Creek-Broad Bay Canal bridge.

#### ROLLINSON CHANNEL AND CHANNEL FROM HATTERAS INLET TO HATTERAS, N.C.

(H. Doc. 457, 87th Cong.)

*Location.*—Hatteras, N.C., is on the Pamlico Sound side of the barrier beach, about 4 miles northeast of Hatteras Inlet. The inlet is a natural opening through the barrier beach about 13 miles southwest of Cape Hatteras, N.C.

*Authority.*—Resolutions of Public Works Committee, U.S. House of Representatives, adopted July 29, 1955, July 31, 1957, and July 16, 1958.

*Existing project.*—Provides for a channel 100 feet wide and 6 feet deep from that depth in Pamlico Sound to and including a basin of the same depth at Hatteras, and rubble-mound breakwaters at harbor entrance.



*Navigation problem.*—Present channels are inadequate for vessels now serving Hatteras Harbor and if channels were improved the larger fishing vessels could use the harbor as a permanent or temporary base of operations. A harbor of refuge in the vicinity is also needed.

*Recommended plan of improvement.*—Provides for deepening Rollinson Channel to 12 feet over its present 100-foot width; deepening the existing Hatteras Harbor to 12 feet; and a channel 10 feet deep and 100 feet wide from Hatteras Inlet Gorge to Hatteras, N.C.

*Estimated cost (price level of June 1960).*—

	Rollinson Channel	Channel from Hatteras Inlet to Hatteras, N.C.	Total
Federal.....	\$416,000	\$236,000	\$652,000
Non-Federal.....	8,000	8,000	16,000
Total.....	424,000	244,000	668,000

*Project economics.*—

	Rollinson Channel	Channel from Hatteras Inlet to Hatteras, N.C.	Total
Annual charges:			
Federal:			
Interest and amortization.....	\$15,300	\$8,900	\$24,200
Operation and maintenance.....	9,000	13,000	22,000
Navigation aids.....	200	100	300
Total.....	24,500	22,000	46,500
Non-Federal:			
Interest and amortization.....	370	370	740
Replacement and maintenance.....	1,130	1,130	2,260
Total.....	1,500	1,500	3,000
Total.....	26,000	23,500	49,500
Annual benefits:			
Transportation savings.....	16,800	21,500	38,300
Reduction in damages.....	10,500	3,900	14,400
Increased catch.....		7,100	7,100
Total.....	27,300	32,500	59,800
Benefit-cost ration:.....	1.05	1.4	1.2

*Local cooperation.*—Furnish lands and rights-of-way, also bulkheads and embankments for spoil area, if needed; hold and save the United States free from damages; provide and maintain public terminal and transfer facilities. Local interests are willing to comply with the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of North Carolina: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## WILMINGTON HARBOR, N.C.

(S. Doc. 114, 87th Cong.)

*Location.*—Wilmington Harbor, serving the port of Wilmington, is located in the lower reaches of the Cape Fear River along the southern part of the Atlantic coast of North Carolina.

*Authority.*—Senate Public Works Committee resolution adopted April 18, 1957.

*Existing project.*—The applicable portion of the Wilmington Harbor project under this investigation consists of a ship channel 35 feet deep and 400 feet wide across the ocean bar, then 34 feet deep and 400 feet wide to the upper end of the anchorage area at Castle Street, Wilmington.

*Navigation problem.*—Local interests desire a deeper and wider channel in the main channel of Wilmington Harbor for larger petroleum vessels.

*Recommended plan of improvement.*—The recommended modification of the existing project for Wilmington Harbor, N.C., would provide a channel 40 feet deep and 500 feet wide through the ocean bar to Southport, N.C., thence 38 feet deep over the existing 400-foot width in the channel to Castle Street and deepening the existing turning basin to the same depth; and that dredging shall not be done by the United States within 50 feet of any pierhead line, wharf, or structure.

*Estimated cost (price level of June 1960).*—

Federal.....	\$6, 370, 000
Non-Federal.....	100, 000
<b>Total.....</b>	<b>6, 470, 000</b>

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$231, 000	\$5, 000	\$236, 000
Maintenance and operation in addition to that now required.....	10, 000	10, 000	10, 000
Maintenance of spoil areas.....		15, 000	15, 000
<b>Total.....</b>	<b>241, 000</b>	<b>20, 000</b>	<b>261, 000</b>
Annual benefits: Transportation savings for petroleum products.....			440, 000

*Benefit-cost ratio.*—1.7.

*Local cooperation.*—Local interests are required to provide all lands, easements and rights-of-way including spoil areas and necessary retaining dikes; hold and save the United States free from damages. The State of North Carolina stated it would fulfill all items of local cooperation that local government agencies are unable to meet.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

State of North Carolina: No objection.

*Comments of the Bureau of the Budget.*—No objection.

## SAVANNAH HARBOR, GA., TURNING BASIN

(S. Doc. 115, 87th Cong.)

*Location.*—Savannah Harbor, located on the Atlantic coast at Savannah, Ga., comprises the lower 31 miles of Savannah River and estuary.

*Authority.*—Senate Public Works Committee resolution adopted December 3, 1958.

*Existing project.*—The existing project provides for an entrance channel 36 feet deep by 500 feet wide across the ocean bar for 9.7 miles; then 34 feet deep and varying 550 to 400 feet for 18.9 miles with two turning basins 34 feet deep and then a channel 30 feet deep and 200 feet wide for 2.4 miles with two turning basins 30 feet deep.

*Navigation problem.*—Local interests desire enlargement of the turning basin at Kings Island.

*Recommended plan of improvement.*—The plan of improvement provides for modification of the Savannah Harbor project to enlarge the turning basin near Kings Island to a width of 900 feet and a length of 1,000 feet.

*Estimated cost (price level 1961).*—

Federal.....	\$605, 000
Non-Federal.....	78, 500
Total.....	683, 500

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$22, 000	\$3, 500	\$25, 500
Maintenance and operation in addition to that now required.....	5, 000	2, 500	7, 500
Total.....	27, 000	6, 000	33, 000
Annual benefits: Transportation savings.....			40, 235

*Benefit-cost ratio.*—1.22.

*Local cooperation.*—Provide all lands, easements and rights-of-way for construction and maintenance including spoil areas and dikes; hold and save the United States free from damage; and provide terminal facilities. Chatham County, Ga., Board of Commissioners will act as local assurer in meeting the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Georgia: Favorable.

*Comments of the Bureau of the Budget.*—No objection.



## KEY WEST HARBOR, FLA.

(S. Doc. 106, 87th Cong.)

*Location.*—Key West is an island off the southern tip of Florida, 130 miles southwest of Miami and 230 miles south of Tampa, Fla.

*Authority.*—Resolution of Public Works Committee, U.S. Senate, adopted March 15, 1951.

*Existing project.*—Provides for a channel 300 feet wide and 30 feet deep, about 6.8 miles, from Key West to deep water to the south; widening of the channel opposite wharves to a width of 800 feet and a depth of 26 feet; and a channel 17 feet deep and of sufficient width for navigation, about 10.4 miles, from Key West to the northwest, with jetties at the northwest entrance. In 1942-43, the U.S. Navy extended the 30-foot channel to a deepwater basin at the Key West Naval Operating Base.

*Navigation problem.*—Present channel inadequate for shrimp fleet and protection is needed for the fleet from damaging waves.

*Recommended plan of improvement.*—Provides for a channel 12 feet deep and 150 feet from the 30-foot ship channel to Key West, a distance of about 3,000 feet; an irregularly shaped turning basin in the bight of the same depth; and a granite-mound breakwater 800 feet long along the north side of the bight.

*Estimated cost (price level, June 1961).*—

Federal.....	\$820, 000
Non-Federal.....	23, 500
Total.....	843, 500

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$30, 200	\$800	\$31, 000
Increased maintenance.....	3, 500		3, 500
Aids to navigation.....	800		800
Economic loss for lands.....		800	800
Total.....	34, 500	1, 600	36, 100
Annual benefits: Reduction in damages and savings in operation time.....			52, 000

*Benefit-cost ratio.*—1.4.

*Local cooperation.*—Furnish lands and rights-of-way, also spoil disposal areas and retaining dikes; hold and save the United States free from damages; provide and maintain public terminal and transfer facilities; and provide and maintain depths in berthing areas commensurate with related project depths. Local interests are willing to comply with the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of the Navy: Favorable.

State of Florida: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## PORT SUTTON AND YBOR CHANNEL, TAMPA HARBOR, FLA.

(H. Doc. 529, 87th Cong.)

*Location.*—Tampa Harbor serves the city of Tampa located on the west coast about midway of the Florida Peninsula. Port Sutton Channel and Ybor Channel are branch channels in the northerly section of the harbor.

*Authority.*—Resolutions of the Senate Public Works Committee adopted November 18, 1958, and January 5, 1959, and two resolutions of the House of Representatives adopted on April 15, 1959.

*Existing project.*—Existing Tampa project features pertinent to this report include channels from the Gulf of Mexico to Tampa, 36 feet deep by 600 feet wide at the entrance, then 34 feet deep over a 500-foot width in Mullet Key Cut and over a 400-foot width in Tampa and Hillsborough Bays to Ybor Basin; turning basins 34 feet deep at Ybor Channel entrance and channels 30 feet deep over widths of 480 and 500 feet in Ybor Channel.

*Navigation problem.*—Local interests dredged a channel at Port Sutton, in 1955, 150 feet wide and a turning basin 500 by 1,300 feet to a depth of 30 feet. They desire that this work be incorporated in the authorized Tampa Harbor project for maintenance. Local interests also desire deepening Ybor Channel from 30 to 34 feet.

*Recommended plan of improvement.*—The plan of improvement provides for modification of the authorized Tampa Harbor project to include maintenance of Port Sutton Channel 150 feet wide and about 3,000 feet long and a turning basin 500 by 1,300 feet; and deepening Ybor Channel to a depth of 34 feet over a width reduced from 500 to 400 feet.

*Estimated cost.*—

	Ybor Channel	Port Sutton Channel
Federal.....	\$997,000	(1)
Non-Federal.....	18,000	(1)
Total.....	1,015,000	(1)

<sup>1</sup> Maintenance only.

*Project economics.*—

	Ybor Channel	Port Sutton Channel
<b>Annual charges:</b>		
Federal:		
Interest and amortization.....	\$36,600	\$1,500
Maintenance and operation (in addition to that now required).....	1,500	5,500
Additional navigation aids maintenance.....		1,500
Total Federal.....	38,100	8,500
Non-Federal.....	700	100
Total.....	38,800	8,600
<b>Annual benefits:</b>		
Transportation savings.....	117,000	266,000
Land filled by dredged material.....	4,000	
Elimination of terminal costs.....		20,000
Total.....	121,000	286,000
Benefit-cost ratio.....	3.1	3.2

*Local cooperation.*—Provide all lands, easements, and rights-of-way for dredging Ybor Channel and for maintenance of this channel and Port Sutton Channel and turning basin including spoil areas and necessary dikes; hold and save the United States free from damage; provide terminal facilities; provide depths in vessel berthing areas and local access channels commensurate with projects; contribute to Ybor Channel project 1.7 percent of construction dredging cost presently estimated at \$17,000. Hillsborough County Port Authority representatives stated that it would be willing and able to comply with these requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

State of Florida: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

WALTER F. GEORGE LOCK AND DAM, CHATTAHOOCHEE RIVER, GA. AND ALA.

(S. Doc. 109, 87th Cong.)

*Location.*—The Walter F. George lock and dam is located on the Chattahoochee River, near Fort Gaines, Ga.

*Authority.*—The authority for the preparation of this report is contained in provisions of the Fish and Wildlife Coordination Act, approved August 12, 1958. This act provides that fish and wildlife conservation shall receive equal consideration with other project features of water resource development programs. In accordance with that act, construction agencies are required to coordinate their planning of water resource programs with the Fish and Wildlife Service during all phases of development.

*Existing project.*—The project is a major component of the plan of development of the Apalachicola River System for navigation and the production of hydroelectric power. The lock and dam is located at river mile 75.3 and will back water to Columbus, Ga., or river mile 160.4. The construction of the project is about 65 percent complete.

*Problem.*—The Chamber of Commerce, Eufaula, Ala., expressed an interest in the establishment of a national wildlife refuge on the Walter F. George Reservoir.

*Recommended plan of improvement.*—In accordance with the Fish and Wildlife Coordination Act, the Secretary of the Interior proposes to establish a National Wildlife Refuge for management of migratory waterfowl in conjunction with the Walter F. George project. Establishment of the proposed refuge would require the acquisition of fee title in place of easements on 453 acres within the present project boundary, and acquisition of fee title to 1,858 acres of additional land outside of the present project boundary.

*Estimated cost.*—

Federal.....	\$500, 000
Non-Federal.....	None
Total.....	500, 000

*Project economics.*—Annual charges, \$37,800; annual benefits, \$39,020.

*Benefit-cost ratio.*—1.03.

*Local cooperation.*—None.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget in its letter of June 5, 1962, commenting on the report of the Corps of



Engineers concerning modification of the Walter F. George project, stated that it had asked the Department of the Interior to review its future plans for the migratory waterfowl program, including an appraisal of the role that refuge lands at water resources projects would play in the total program. The Budget further stated that in order to preserve the advantages of unified planning and financing of the migratory waterfowl refuge system within a single source of funds, consideration was being given to a procedure under which duck-stamp revenues would be used to repay the Treasury for general fund appropriations used in the prior fiscal year to acquire waterfowl lands at water resources projects. It was further stated by the Budget that if the recommended modification of the Walter F. George lock and dam was authorized by the Congress, it may later be considered appropriate to finance the acquisition of lands outside project boundaries in this manner. With this understanding, the Budget advised that there would be no objection to the submission of the report to the Congress.

PENSACOLA HARBOR, FLA.

(H. Doc. 528, 87th Cong.)

*Location.*—Pensacola Harbor is on the northwest coast of Florida, about 59 miles east of Mobile, Ala., and 103 miles west of Panama City, Fla.

*Authority.*—Resolutions of Rivers and Harbors Committee and Public Works Committee, U.S. House of Representatives, adopted November 20, 1945, and June 3, 1959, respectively; also River and Harbor Act approved March 2, 1945.

*Existing project.*—Provides for an entrance channel 32 feet by 500 feet, about 3.4 miles, from Gulf of Mexico to Pensacola Bay; two parallel approach channels each 30 feet by 250 feet by 3,700 feet, leading to opposite ends of Pensacola Harbor; an inner harbor channel 30 feet by 500 feet by 3,500 feet, parallel to the pierhead line; an approach channel 30 feet by 250 feet, about 1.2 miles, to the pierhead line opposite Muscogee wharf; and a channel 21 feet by 100 feet from Pensacola Bay to mouth of Bayou Chico, about 1 mile, thence 20 feet by 100 feet, about 4,400 feet terminating at a turning basin 20 feet by 500 feet by 500 feet. Present depths in Bayou Chico are 15 feet in outer channel and 14 feet in inner channel and turning basin. In 1958 and 1959 the entrance channel was enlarged to 37 feet by 800 feet, and an aircraft carrier mooring basin 35 feet deep, of about 1,200 acres, was dredged in lower Pensacola Bay at Navy expense. The Gulf Intracoastal Waterway, 12 feet by 125 feet, crosses the harbor entrance channel in the lower part of Pensacola Bay.

*Navigation problem.*—Controlling project depths and widths of existing channels place undue restriction on shipping and deprive Pensacola of a considerable amount of commerce that would otherwise move through the port. This situation is expected to become more critical in view of the trend toward construction and use of larger cargo vessels.

*Recommended plan of improvement.*—Provides for maintenance of entrance channel from gulf to Pensacola Bay, about 5 miles, to 35 feet deep and 500 feet wide; maintenance of a channel along south side of aircraft carrier mooring basin, about 2.5 miles, to 33 feet deep and 300 feet wide; a bay channel 33 feet deep, 300 feet wide, and about

2.1 miles long; parallel approach channels to opposite ends of inner harbor channel about 1.3 and 1.4 miles long, each 33 feet deep and 300 feet wide, and flared at the junctions with the inner harbor channel; and deepening the existing 500-foot-wide inner harbor channel to a depth of 33 feet and lengthening it to 3,950 feet.

*Estimated cost (price level of October 1961).*—All Federal, \$424,000.

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$16,000		\$16,000
Increased maintenance.....	90,000		90,000
Maintenance of slips.....		\$1,000	1,000
<b>Total.....</b>	<b>106,000</b>	<b>1,000</b>	<b>107,000</b>
<b>Annual benefits:</b>			
Transportation savings.....			162,000
Maintenance savings to U.S. Navy.....			40,000
<b>Total.....</b>			<b>202,000</b>

*Benefit-cost ratio.*—1.9.

*Local cooperation.*—Furnish lands and rights-of-way, also spoil disposal areas and retaining dikes; provide and maintain public terminal and transfer facilities; provide and maintain depths in berthing areas and local access channels serving the terminals commensurate with depths provided in the related project areas; and hold and save the United States free from damages. Local interests are willing to comply with the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objections.

Department of the Navy: No objections.

State of Florida: Favorable.

*Comments of the Bureau of the Budget.*—No objections.

#### HOLT LOCK AND DAM, WARRIOR RIVER, ALA.

Holt lock and dam, Warrior River, Ala., was authorized by the Secretary of the Army on December 29, 1958, under the provisions of section 6 of the River and Harbor Act, approved March 3, 1909, and section 12 of the River and Harbor Act, approved July 25, 1912. Under this authority Holt lock and dam with provisions for future power, will replace the old locks and dams 13 through 16, inclusive.

The power requirements in the area need additional sources of supply. Power facilities at the project, if justified, would provide an economic source that could partly meet the expanding needs in the area.

The committee believes that the Secretary of the Army should be authorized and directed to initiate an immediate study, under the direction of the Chief of Engineers, with a view to providing hydroelectric power generating facilities in the Holt Dam as determined to be justified. The committee has accordingly included language in the bill authorizing the survey.

#### PASCAGOULA HARBOR, MISS.

(H. Doc. 560, 87th Cong.)

*Location.*—On Mississippi Sound, in Jackson County, Miss., 32 miles west of the entrance to Mobile Bay, Ala.



*Authority.*—Senate Public Works Committee resolution, August 21, 1961; House Public Works Committee resolution, August 24, 1961.

*Existing project.*—A channel 38 feet deep and 325 feet wide across the outer bar at Horn Island Pass, thence 33 feet deep and 275 feet wide across Mississippi Sound and up Pascagoula River to a turning basin of the same depth having a maximum width of 950 feet and a length of about 2,000 feet on the west side of the channel just below the railroad bridge, thence 22 feet deep and 150 feet wide up Pascagoula and Dog Rivers to Highway 63 bridge over Dog River, thence 12 feet deep and 125 feet wide, via a cutoff channel through Robertson and Bounds Lakes to mile 6 on Dog River. The River and Harbor Act approved September 3, 1954, authorized modification of the existing project in accordance with plans on file in the office, Chief of Engineers.

*Navigation problem.*—Insufficient depths limit the drafts of vessels calling at the port and the situation is expected to become more critical in view of the trend toward the use of larger vessels for grain and oil transport.

*Recommended plan of improvement.*—Pascagoula Harbor, as modified, would have an entrance channel 40 feet deep and 350 feet wide from deep water in the Gulf of Mexico through Horn Island Pass, including an impounding area for littoral drift 40 feet deep, 200 feet wide, and about 1,500 feet long adjacent to the channel at the west end of Petit Bois Island; a channel 38 feet deep and 350 feet wide in Mississippi Sound and Pascagoula River to the railroad bridge at Pascagoula, including a turning basin 2,000 feet long and 950 feet wide (including the channel area) on the west side of the river below the railroad bridge; and a channel 38 feet deep and 225 feet wide from the ship channel in Mississippi Sound to the mouth of Bayou Casotte, thence 38 feet deep and 300 feet wide for about 1 mile to a turning basin 38 feet deep, 1,000 feet wide, and 1,750 feet long. No dredging shall be done by the United States within 50 feet of any established harbor line, wharf, or other structure.

*Estimated cost (price level of June 1962).*—

Federal.....	<sup>1</sup> \$4, 870, 000
Non-Federal.....	35, 000
<b>Total.....</b>	<b><sup>1</sup> 4, 905, 000</b>

<sup>1</sup> Exclusive of \$15,000 for aids to navigation provided by the Coast Guard and \$30,000 for preauthorization studies.

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$138, 000	\$1, 000	\$139, 000
Additional maintenance dredging.....	155, 000		155, 000
Additional maintenance of slips and retaining dikes.....		2, 000	2, 000
<b>Total.....</b>	<b>293, 000</b>	<b>3, 000</b>	<b>296, 000</b>
<b>Annual benefits:</b>			
Transportation grain.....			1, 275, 000
Petroleum and petroleum products.....			2, 679, 000
<b>Total.....</b>			<b>3, 954, 000</b>



*Benefit-cost ratio.*—13.4.

*Local cooperation.*—Furnish lands, easements, rights-of-way, and spoil disposal areas for construction and maintenance of project and necessary retaining dikes, bulkheads, and embankments, or the cost of such retaining works; hold and save the United States free from damage; and provide and maintain depths in berthing areas commensurate with project depths.

*Comments of State and Federal agency.*—

Department of the Interior: No objection.

State of Mississippi: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### MISSISSIPPI RIVER (BATON ROUGE TO GULF OF MEXICO), LA.

(S. Doc. 36, 87th Cong.)

*Location.*—The reach of the Mississippi River under consideration extends from Baton Rouge to the Gulf of Mexico, about 250 miles.

*Authority.*—Resolution of the Committee on Public Works, U.S. Senate, adopted May 8, 1958.

*Existing project.*—The existing Federal navigation project, Mississippi River, Baton Rouge to the Gulf of Mexico, provides for a channel in the Mississippi River 35 feet deep and 500 feet wide from Baton Rouge, mile 232.6 above Head of Passes, to New Orleans; thence 35 feet deep and not more than 1,500 feet wide measured from a line generally 100 feet from the face of the left bank wharves but not closer than 100 feet to wharves on the right bank within the port limits of New Orleans, mile 104.5 to mile 86.7; thence 40 feet deep and 1,000 feet wide to mile 0, Head of Passes; thence 40 feet deep and 800 feet wide through Southwest Pass, to mile 20.2 below Head of Passes; and thence 40 feet deep and 600 feet wide through Southwest Pass bar channel. Deepening the Southwest Pass channel and the Southwest Pass bar channel from 35 to 40 feet, has been initiated. The Mississippi River gulf outlet project is authorized to provide a 36-foot deep channel from New Orleans to the gulf via a land cut east of the river and includes a lock at New Orleans for access to the Mississippi River.

*Navigation problem.*—The problem covers channel enlargement of Mississippi River to Baton Rouge to allow economic loading of tankers and bulk carriers of increasing size.

*Recommended plan of improvement.*—Modification of the existing project, Mississippi River, Baton Rouge to the Gulf of Mexico, La., to provide for a channel 40 feet deep and 500 feet wide from one-tenth mile below the Louisiana Highway Commission bridge at Baton Rouge to the upper limits of the port of New Orleans and within the presently authorized 35- by 1,500-foot channel in the port limits of New Orleans.

*Estimated cost (price level of September 1959).*—

Federal.....	\$357, 000
Non-Federal.....	None
Total.....	357, 000

*Project economics.*—

## Annual charges:

Interest and amortization.....	\$13, 400
Maintenance and operation.....	275, 000

Total.....	288, 400
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Annual benefits: Savings in transportation.....	\$1, 310, 000
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*Benefit-cost ratio.*—4.5.*Local cooperation.*—None.*Comments of the States and Federal agencies.*—

Department of Interior: Favorable.

State of Louisiana: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## GULF INTRACOASTAL WATERWAY, LA., AND TEX.

(H. Doc. 556, 87th Cong.)

*Location.*—The Gulf Intracoastal Waterway is a Federal shallow-draft project extending 1,115 miles from Apalachee Bay, Fla., to Brownsville, Tex., on the Mexican border.

*Authority.*—House Public Works Committee Resolution, June 11, 1952.

*Existing project.*—Several prior projects provided for inland waterways 5 feet deep and 40 feet wide from New Orleans to Sabine River, on the Louisiana-Texas boundary, and between Galveston Bay and Corpus Christi, Tex. The River and Harbor Acts of 1925 and 1927 provided for a channel 9 feet deep and 100 feet wide from the Mississippi River to Corpus Christi, and for an alternate channel of the same dimensions from the Mississippi River to Morgan City, La., via the Plaquemine River. The existing dimensions of 12-foot depth and minimum width of 125 feet were provided for by the River and Harbor Act of 1942. The existing project in Texas also provides for nine feeder or tributary channels, two side channels at Port Isabel, a railroad bridge over the main channel near High Island, floodgates or locks at the Brazos and Colorado Rivers, a flood-discharge channel in the Colorado River extending from the main channel of the Gulf Intracoastal Waterway near Matagorda to the Gulf of Mexico, and a harbor of refuge at Seadrift.

*Navigation problems.*—The most serious navigation difficulties result from the present width and depth of the channel which restrict efficient operation of marine equipment. Several bends are too sharp to be negotiated with modern tows except at slow speed. A large portion of the power required for towing is expended in overcoming the drag, or friction, caused by the limited channel dimensions. This characteristic also increases vessel damages and insurance rates. Furthermore, tows experience difficulty in passing in the channel. In a 6-mile reach at Houma, La., the shortsight distances at several bends, the narrow width of channel and bridge openings, and erosion of the channel banks, make it necessary for craft to proceed slowly. However, the delays that occur and hazards that exist are not considered sufficient to influence the future development of traffic.

*Recommended plan of improvement.*—That the existing project for the Gulf Intracoastal Waterway be modified to provide for channels

of the following dimensions through the reaches listed, except at existing locks and other structures and through intensively developed areas; a channel 16 feet deep and 150 feet wide from the Mississippi River, via Algiers Canal and a bypass route at Houma, La., to Atchafalaya River; a channel 16 feet deep and 200 feet wide through the reach from the Atchafalaya River to the Sabine River; a channel 16 feet deep and 150 feet wide through the reach from the Sabine River to the Houston Ship Channel with two relocations; a channel 12 feet deep and 125 feet wide through a relocated route in Matagorda Bay (mile 454.3 and mile 471.3); a channel 12 feet deep and 125 feet wide through a relocated route in Corpus Christi Bay (mile 439.4 and mile 550); maintenance of channel 12 feet deep and 125 feet wide through the existing Lydia Ann Channel between Aransas Bay and Aransas Pass; and maintenance of the existing waterway to 12 feet deep and 125 feet wide between mile 50.5 and mile 63.5, the reach which would be shunted by the Houma bypass.

*Estimated cost (price level December 1960).—*

Federal.....	\$25, 540, 000
Non-Federal.....	7, 238, 000
Total.....	32, 778, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$930, 000	\$337, 000	\$1, 267, 000
Maintenance and operation.....	56, 000	66, 000	122, 000
Renewed maintenance (Lydia Ann Channel).....	6, 000	}	9, 000
Maintenance of navigation aids.....	3, 000		
Total.....	995, 000	403, 000	1, 398, 000
Annual benefits: Savings in navigation costs.....			3, 008, 000

*Benefit-cost ratio.—2.2.*

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for construction and and subsequent maintenance of the project and of aids to navigation upon the request of the Chief of Engineers. Accomplish and maintain without cost to the United States all alterations to pipelines, cables, and any other utilities necessary for the construction of the project; construct, maintain, and operate all bridges desired in connection with the bypass route around Houma, La; and hold and save the United States free from damages resulting from the construction work and the maintenance of the channels.

*Comments of the States and Federal agencies.—*

Department of the Interior: No objection.

State of Louisiana: Favorable.

State of Texas: Favorable.

*Comments of the Bureau of the Budget.*—No objection.



## CALCASIEU RIVER SALT WATER BARRIER, LOUISIANA

(H. Doc. 582, 87th Cong.)

*Location.*—Southwestern corner of Louisiana.*Authority.*—Flood Control Act 1944 and River and Harbor Act 1945.

*Existing project.*—The existing Federal project for Calcasieu River provides for an approach channel 42 feet deep and 800 feet wide from the Gulf of Mexico to the jetty channel; a channel 40 feet deep and 400 feet wide to the wharves of the port of Lake Charles (mile 34.0); a channel 35 feet deep and 250 feet wide to the vicinity of the U.S. Highway 90 bridge (mile 36.2); improvement of the river upstream to Phillips Bluff (mile 85.9) by removing logs, snags, overhanging trees, and by dredging; a mooring basin 40 feet deep at about mile 3.0, and turning basins 40 feet deep and 35 feet deep at miles 29.6 and 36.2, respectively; and a 12-foot by 200-foot channel from the ship channel to Cameron, La. The Federal project for the Gulf Intra-coastal Waterway, which crosses the Calcasieu River at mile 22.5, provides, among other things, for the construction of a salt-water guard lock in the waterway about 0.5 mile east of the river. The lock protects the Mermentau River Basin from intrusion of salt water from the Calcasieu River.

*Problem.*—Land suitable for rice irrigation has been contaminated by salt intrusion or by continued application of river water with a salt content which has permitted accumulation of salt in the soil and thereby limiting or prohibiting rice production.

*Recommended plan of improvement.*—Construction of a salt water barrier system consisting of a diversion channel and control structure; a navigation channel with gate structure having a single pair of sector gates with a horizontal clear opening of 56 feet and a sill elevation of —13.0; closure of the existing river channel by an earthen dam in the bend of the river to be abandoned; and protective revetment of the left bank of the river above the head of the diversion channels.

*First cost (price levels October 1961).*—

Federal.....	\$3, 310, 000
Non-Federal.....	43, 000
Total.....	3, 353, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest.....	\$87, 780	\$1, 720	\$89, 500
Amortization.....	33, 080	280	33, 360
Maintenance and operation.....	59, 260		59, 260
Other (replacements).....	2, 180		2, 180
Total.....	182, 300	2, 000	184, 300

Annual benefits: From prevention of damage resulting from salt water intrusion \$270,000.

*Benefit-cost ratio.*—1.5.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for the construction and subsequent maintenance of the project; provide without cost to the United States all relocations of buildings, utilities, pipelines, roads, or

other facilities made necessary by the improvements; hold and save the United States free from damages due to the construction works and operation of the projects; and keep the river bendway channel between the closure dam at about mile 43.2 and the mouth of the cutoff channel at about mile 38.8 free from pollution to the satisfaction of the State of Louisiana Stream Control Commission without cost to the United States.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Louisiana: Favorable.

*Comments of the Bureau of the Budget.*—Noted that the improvements proposed means of mitigating adverse effects of a previously constructed project and believed that since local interests were aware that unmitigated damages might occur, but concurred in the project, there is an implied willingness to accept the project-induced damages to obtain the project benefits. The Bureau further believed it reasonable in this case to consider provision of measures to relieve consequential damages from adverse effects not as part of the original project, but rather as a separate project under policies applicable to conditions of Federal participation and cost sharing for the purpose served by the proposed mitigation measures; and, that, unless there are compelling reasons not evident from the record, the Calcasieu River salt water barrier should be viewed as a project for irrigation water supply, with appropriate terms of repayment. Subject to consideration of these views, the Bureau of the Budget has no objection to submission of the report to the Congress.

*Recommendation of the Secretary of the Army.*—The Secretary of the Army in his letter of transmittal to the Congress, dated September 24, 1962, recommended that in keeping with the views of the Bureau of the Budget and the nature of the project of which the salt water barrier system will comprise a part, the proposal of the Chief of Engineers be modified to provide that local interests bear 50 percent of the cost of construction of the salt water barrier system, an amount presently estimated at \$1,655,000.

*Remarks.*—The committee is of the opinion that the recommendations of the Chief of Engineers follow the same pattern as exists in works for the prevention and mitigation of salt water damage in other areas along the gulf coast constructed by the Federal Government.

#### MISSISSIPPI RIVER AT CLARKSVILLE, MO.

(H. Doc. 552, 87th Cong.)

*Location.*—Clarksville, Mo., is located on the right bank of the Mississippi River about 273 miles upstream from the Ohio River and immediately below lock and dam 24.

*Authority.*—House Public Works Committee resolution adopted March 30, 1955.

*Existing projects.*—Lock and dam 24 was authorized by River and Harbor Act, July 3, 1930, and placed in operation in May of 1940.

*Navigation problem.*—The channel in front of Clarksville has become silted up because of the position of the lock 24 guidewall which prevents any sluicing action by the Mississippi River. In addition a sewerage problem has developed from lack of sanitary sewers emptying into the area.



*Recommended plan of improvement.*—The most economical and practical means of restoring waterfront depths and eliminating the sewer problem would be by removal of 38,000 cubic yards of silt initially and about 15,000 cubic yards at 5-year intervals. If the United States is to compensate for damages it is recommended that sole compensation be made by cash payment representing the cost of remedial work and the capitalized annual cost of maintenance.

*Estimated cost (price level of June 1961).*—Federal, \$103,300.

*Project economics.*—Annual charges, not applicable; annual benefits, not applicable; project is remedial in nature.

*Benefit-cost ratio.*—Not applicable.

*Local cooperation.*—Provide a release from all past and future claims against the construction, and operation and maintenance of the Mississippi River 9-foot project.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Missouri: Favorable.

*Comments of the Bureau of the Budget:* No objection.

#### SANDY SLOUGH, LINCOLN COUNTY, MO.

(H. Doc. 419, 87th Cong.)

*Location.*—Adjacent to the right bank of Mississippi River at lock and dam No. 25.

*Authority.*—House Public Works Committee Resolution adopted July 31, 1957.

*Existing project.*—None.

*Navigation problem.*—In 1938, an earth closure dike was constructed along the slough to contain the pool of dam 25; Mississippi River systems. Stages at the mouth of Sandy Slough, as effected by pool operations of Dams 25 and 26, vary from 419.0 to 429.7 above mean sea level. Flash floods, principally in the Sandy Creek Basin, are the major cause of silt in Sandy Slough. There is no longer a well defined channel in the slough, and small boats are limited to its lower reaches at minimum pool stages. Docks which originally were located at the foot of high banks are no longer usable because of the accumulation of silt. Along the right bank there are 116 clubhouses, picnic areas, and accompanying recreational facilities. As a result of the unfavorable environment, caused by silting of the slough, property values have not kept pace with those in more favorable areas.

*Recommended plan of improvement.*—Remedial work to consist of dredging a channel with a bottom width of 60 feet, a depth varying up to 4 feet, and a length of 3.2 miles.

*Estimated cost (price level, July 1960).*—

Federal.....	\$195, 000
Non-Federal.....	6, 000
<b>Total.....</b>	<b>201, 000</b>

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$7, 800	\$300	\$8, 100
Maintenance and operation.....	4, 500	500	5, 000
<b>Total.....</b>	<b>12, 300</b>	<b>800</b>	<b>13, 100</b>



*Annual benefits.*—Plan of improvement will remedy the injurious effects of the Mississippi River navigation project.

*Benefit-cost ratio.*—Not applicable.

*Local cooperation.*—Furnish lands, easements and rights-of-way; hold and save the United States free from damages; assure availability of slough to public for navigation and recreation; prohibit dock construction within channel limits; and remove snags and other material not a part of normal silting.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

State of Missouri: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### SABINE-NECHES WATERWAY, TEX

(H. Doc. 553, 87th Cong.)

*Location.*—The Sabine-Neches Waterway, located in the southeast corner of Texas about 225 miles west of New Orleans, La., and 65 miles east of Galveston, Tex., provides deepwater access to the Gulf of Mexico for Port Arthur, Beaumont, and Orange, Tex.

*Authority.*—Resolution of the Committee on Public Works of the House of Representatives, adopted June 3, 1959.

*Existing project.*—The existing Federal project provides for a channel 37 feet deep and 800 feet wide from deepwater in the gulf through the outer bar decreasing to 36 feet deep and 500 feet wide through Sabine Pass, thence 36 feet deep and 400 feet wide to Port Arthur and to the mouth of the Neches River, decreasing to 350 feet wide in the Neches River to Beaumont; a channel 30 feet deep and 200 feet wide across the north end of Sabine Lake and up the Sabine River to Orange. It also includes stone jetties at the Sabine Pass entrance, turning basins at Port Arthur and Beaumont, modification of the bridge at Port Arthur by extending the east approach to span the widened Sabine-Neches Canal and other related improvements.

*Navigation problem.*—The existing channel to Port Arthur and Beaumont is inadequate for the operation of fully loaded tankers greater than 27,000 deadweight tons which are replacing the older tankers in the coastwise movement of petroleum. Also, the bascule span of the Port Arthur Bridge is a bottleneck to traffic in the Sabine-Neches Canal and its location in the westerly half of the channel makes navigating that reach hazardous.

*Recommended plan of improvement.*—The recommended plan provides for deepening the channel to 42 feet from the gulf across the Sabine Bank into the jetty channel, thence a depth of 40 feet in all inland channels to Port Arthur and to the Beaumont turning basin, including the Sabine Pass anchorage basin, Port Arthur turning basins including approach and connecting channels; widening the Port Arthur Canal to 500 feet and the channel from the mouth of the Neches River to the Beaumont turning basin to a width of 400 feet; three turning points at junctions of channel cutoffs with natural bends in the Neches River; maintenance of a short reach of former project channel in the Neches River; a shallow-draft extension 12 feet deep and 125 feet wide in the Sabine River from the upstream end of the

existing project to a point near Echo, Tex.; and replacement of the obstructive bridge at Port Arthur.

*Estimated cost (price level of March 1962).—*

	Federal	Non-Federal	Total
Improved deep-draft channel.....	\$20,541,000	\$1,378,000	\$21,919,000
Shallow-draft extension.....	289,000	170,000	459,000
Total.....	20,830,000	1,548,000	22,378,000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Deep-draft channel:			
Interest and amortization.....	\$636,000	\$76,000	\$712,000
Maintenance and operation.....	620,000	24,000	644,000
Total.....	1,256,000	100,000	1,356,000
Shallow-draft extension:			
Interest and amortization.....	8,000	6,000	14,000
Maintenance and operation.....	1,000	—	1,000
Total.....	9,000	6,000	15,000
Annual benefits:			
Deep-draft channel:			
Savings in tanker operation.....	—	—	2,173,000
Reduced hazards.....	—	—	160,000
Total.....	—	—	2,333,000
Shallow-draft extension savings in operation.....	—	—	28,000

*Benefit-cost ratio.*—Deep-draft channel, 1.7; shallow-draft extension, 1.9.

*Local cooperation.*—Furnish all lands, easements, and rights-of-way including spoil disposal areas with suitable retaining dikes, bulkheads, and embankments; hold and save the United States free from damages; make alterations to pipelines, powerlines, utility lines, cables, and highway facilities, except replacement of the bridge at Port Arthur; furnish the necessary rights-of-way and easements required for re-locating the highway bridge at Port Arthur and contribute, in cash, a share of its construction cost, a sum presently estimated at \$220,000 for the expired service of the existing bridge, but excluding the cost for special benefits and betterments attributable to highway use which depend upon final design; assume all obligations of ownership, operation, and maintenance of the replacement highway bridge at Port Arthur; provide and maintain at local expense depths in berthing areas and local access channels commensurate with depths in the related project areas. Local interests have indicated their willingness and ability to meet these requirements.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Commerce: Favorable.

State of Texas: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## WALLISVILLE RESERVOIR, TRINITY RIVER, TEX.

(H. Doc. 215, 87th Cong.)

*Location.*—Trinity River rises in north-central Texas and flows in a southerly direction for about 700 miles and empties into Trinity Bay, a part of Galveston Bay. Wallisville Dam would be located in Chambers County near the mouth of the river.

*Authority.*—Resolutions, House Committee on Rivers and Harbors adopted March 31, 1944, and February 28, 1945; resolution, Senate Committee on Public Works adopted January 20, 1958; River and Harbor Act of 1958.

*Existing project.*—The authorized Federal navigation project for the lower Trinity River provides for a sea level channel 9 by 150 feet extending from the Gulf up to the town of Liberty, a distance of 49 miles.

*Problems.*—Adequate and dependable navigation is vital to support the economy of the area; similarly, water conservation for municipal and industrial uses is important to the present and future growth. A barrier against salt water intrusion is of major importance to preserve fresh water, particularly for irrigation of the rice crop, which largely sustains the local economy.

*Recommended plan of improvement.*—Recommended plan consists of a small reservoir (total capacity 55,700 acre-feet) for purposes of water conservation, navigation, prevention of salt water intrusion, recreation, and fish and wildlife. Also recommended is a diversion channel with appurtenant lock for navigation purposes. Further, that careful consideration to be given to the recommendations of the U.S. Fish and Wildlife Service providing for acquisition of about 2,000 additional acres of land for purposes of a national wildlife refuge at the reservoir.

*Estimated cost (price level of January 1959).*—

Federal.....	<sup>1</sup> \$9, 162, 000
Non-Federal.....	( <sup>2</sup> )
<b>Total.....</b>	<b>9, 162, 000</b>

<sup>1</sup> Exclusive of cost of lands for wildlife refuge purposes, estimated at \$400,000.

<sup>2</sup> Local reimbursable costs currently estimated at \$1,682,000.

*Project economics.*—

**Annual benefits:**

Salinity control.....	250, 000
Navigation.....	376, 000
Water supply.....	149, 300
F. & W. conservation.....	29, 000
F. & W. recreation.....	184, 000
General recreation.....	307, 000
<b>Total.....</b>	<b>1, 295, 300</b>

*Benefit-cost ratio.*—2.5.

*Local cooperation.*—Reimburse the United States all costs allocated to water conservation and one-half the costs allocated to salinity control, the totals being currently estimated at \$1,682,000 for construction and \$27,200 annually for maintenance, operation, and replacements.



*Comments of the State and Federal agencies.—*

State of Texas: Favorable.

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of HEW: Favorable.

Federal Power Commission: Favorable.

*Comments of the Bureau of the Budget.—*No objection. Bureau expects that prior to request for construction funds, project costs would be reallocated to conform with then current administration standards.

## GULF INTRACOASTAL WATERWAY—CHANNEL TO PALACIOS, TEX.

(H. Doc. 504, 87th Cong.)

*Location.—*Palacios, Tex., is located in Matagorda County on the west shore of Trespacios Bay about 96 miles southwest of Galveston and 97 miles northeast of Corpus Christi.

*Authority.—*Resolution of the House Committee on Rivers and Harbors adopted September 13, 1944.

*Existing project.—*The existing Federal project provides for a channel 9 feet deep, 100 feet wide and about 13.5 miles long extending from the main channel of the Gulf Intracoastal Waterway across Matagorda and Trespacios Bays to a turning basin at Palacios, Tex.

*Navigation problem.—*The present channel is inadequate for the large fishing boats that operate in the Gulf of Mexico and for fully loaded barges operating in the Gulf Intracoastal Waterway. Also prevailing winds generate considerable wave action in the turning basins making vessel maneuvering difficult during periods of strong winds.

*Recommended plan of improvement.—*Provides for a channel 12 feet deep and 125 feet wide extending from the main channel of the Gulf Intracoastal Waterway in Matagorda Bay to the turning basins at Palacios, two protective breakwaters at the entrance to the turning basins, and deepening and maintaining the two turning basins and connecting channel to 12 feet with dimensions of 200 feet by 700 feet in turning basin No. 1, 300 feet by 1,150 feet in turning basin No. 2, and 150 feet to 480 feet wide by 450 feet long in the connecting channels.

*Estimated cost (price level of October 1961).—*

Federal.....	\$818, 000
Non-Federal.....	70, 000
Total.....	888, 000

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$23, 500	\$3, 000	\$26, 500
Maintenance and operation.....	15, 000		15, 000
Navigation aids.....	6, 000		6, 000
Total.....	44, 500	3, 000	47, 500
<b>Annual benefits:</b>			
Transportation savings.....			41, 000
Reduced hazards.....			14, 000
Total.....			55, 000

*Benefit-cost ratio.*—1.2.

*Local cooperation.*—Furnish all lands, easements, rights-of-way, and spoil disposal areas which have been suitably diked; hold and save the United States free from damages; make alterations to pipelines, powerlines, utility lines, cables, and highway facilities; continue to provide public terminal and transfer facilities open to all; and provide depths in berthing areas commensurate with project depths. Local interests have indicated their willingness and ability to meet these requirements.

*Comments of State and Federal agencies.*—

Department of the Interior: Favorable.

State of Texas: Favorable.

*Comments of the Bureau of the Budget.*—No objection to submission of report to Congress. However, the Bureau states that in view of the relatively marginal economic justification of the project and the obvious difficulty of predicting benefits over a period as long as 100 years, it would expect that the project, if authorized, would be re-evaluated prior to any request for funds to initiate construction.

#### GULF INTRACOASTAL WATERWAY CHANNEL TO VICTORIA, TEX.

(H. Doc. 288, 87th Cong.)

*Location.*—The channel to Victoria is located in the south central part of Texas about 55 miles northeast of Corpus Christi and 95 miles southwest of Freeport, Tex.

*Authority.*—Resolution of the Committee on Public Works of the House of Representatives, adopted June 3, 1959.

*Existing project.*—Provides for a sea level channel 9 feet deep and 100 feet wide extending northwestward about 35 miles from the Gulf Intracoastal Waterway to a turning basin about 7 miles south of Victoria, and a side channel about 2 miles long to a turning basin at Seadrift. The project is essentially completed as far as the Missouri Pacific Railroad crossing at about channel mile 29 including the side channel to Seadrift. Work is underway on a 3-mile segment above the railroad crossing leaving almost 3 miles of channel and the turning basin at Victoria to be started.

*Problem.*—Local interests desire modification of the requirements of local cooperation for the authorized project to conform with current policy concerning construction of railroad bridges over navigation channels dredged in land cuts and construction and maintenance of turning basins.

*Recommended plan of improvement.*—The Federal Government construct the bridge for the Missouri Pacific Railroad crossing at channel mile 29.2; dredge and maintain a turning basin 9 feet deep, with average width of 600 feet and average length of 780 feet near Victoria, Tex.; and maintain a turning basin 9 feet deep, 250 feet wide, and 300 feet long at Seadrift, Tex.

*Estimated cost (price level of June 1960).—*

Railroad bridge.....	\$1, 300, 000
Victoria turning basin.....	290, 000
<b>Total.....</b>	<b>1, 590, 000</b>

	Project cost as presently authorized	Proposed modification	Project cost including proposed modification
Federal.....	\$6, 549, 000	+\$1, 590, 000	\$8, 139, 000
Non-Federal.....	6, 486, 000	—1, 590, 000	4, 896, 000
<b>Total.....</b>	<b>13, 035, 000</b>		<b>13, 035, 000</b>

*Local cooperation.*—Furnish all lands, easements, and rights-of-way required for construction of the railroad bridge, for construction and maintenance of the Victoria turning basin, and for maintenance of the turning basin at Seadrift, including suitable areas for disposal of spoil (adequately diked and bulkhead); hold and save the United States free from damages; bear all costs of owning, operating, and maintaining the new railroad bridge and related sections of railroad embankment and track; make alterations in pipelines, powerlines, utility lines, cables, and highway facilities in connection with work at the Victoria and Seadrift turning basin; and provide adequate public terminal and transfer facilities, open to all on equal terms. Local interests have indicated their willingness and ability to meet the requirements of local cooperation.

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$320, 000	\$262, 000	\$582, 000
Operation and maintenance.....	193, 000	0	193, 000
<b>Total.....</b>	<b>513, 000</b>	<b>262, 000</b>	<b>775, 000</b>
<b>Annual benefits:</b>			
General navigation benefits.....			1, 272, 000
Flood damages prevented.....			15, 000
Increased land utilization due to prevention of flooding.....			160, 000
<b>Total.....</b>			<b>1, 447, 000</b>

*Benefit-cost ratio.*—1.9.*Comments of State and Federal agencies.*—

Department of the Interior: Favorable.

State of Texas: Favorable.

*Comments of the Bureau of the Budget.*—No objection.



## ILLINOIS WATERWAY, ILL. AND IND.

(H. Doc. 31, 86th Cong.)

*Location.*—The Illinois Waterway provides a channel for barge navigation between the Mississippi River, 38 miles above St. Louis, and Lake Michigan at Chicago.

*Report authorized by.*—House Rivers and Harbors Committee resolution adopted March 16, 1943; Senate Public Works Committee resolution adopted March 24, 1956.

*Existing projects.*—Provides for nine locks and six dams; navigation channel 9 feet deep in the Illinois and Des Plaines Rivers from the mouth of the Illinois River to Lockport, a distance of 291.1 miles; upstream extension and branch channels 9 feet deep in the Chicago Sanitary and Ship Canal, Chicago River, Calumet-Sag Channel, Little Calumet River, Calumet River, and Grand Calumet River; and appurtenant improvements including bridge changes. The project is complete except for construction of two locks, one on Calumet River and the other on Grand Calumet River and improvements of the branch channel in the Grand Calumet River.

*Navigation problem.*—Commerce on the Illinois River has increased since the improved waterway to Chicago was opened from about 1.7 million tons in 1935 to 21.4 million tons in 1955. Most of the traffic delays now occur at the locks because many tows require rearrangement to permit a single lockage and the larger tows must make a double lockage. The congestion at the locks resulting from these delays will be more critical as the traffic increases.

*Recommended plan of improvement.*—Modification of existing project to provide for construction of supplemental locks, 110 feet wide and 1,200 feet long, at the seven existing lock sites on the Illinois and Des Plaines Rivers. (The first two locks estimated to be needed by 1968 and the last three by 1977.)

*Estimated cost (price level of January 1957).*—All Federal, \$114,652,000.

*Project economics.*—

Annual charges.....	\$4, 594, 300
Annual benefits: All transportation savings.....	22, 320, 000
Benefit-cost ratio.....	4.9

*Local cooperation.*—Provided that prior to construction local interests agree that they will assume title to, and maintain and operate the new bridge across the lower approach to the Brandon Road lock when the bridge is placed in service.

*Comments of State and Federal agencies.*—

Fish and Wildlife Service: No interest in project.

State of Illinois. Concurs in conclusions and recommendations.

*Comments of the Bureau of the Budget.*—Notes that commerce on the waterway has increased at a rapid rate since 1935; however, it states that a projection of the past rate of growth is by no means certain. The Bureau of the Budget does not question the economic justification, but considers authorization 10 to 19 years in advance of the need is premature and accordingly urges that the report be regarded only as a study of future need, and that the estimates on commerce and average tons per lockage be brought up to date in a future report to Congress in 5 years.

*Remarks.*—The committee considers that in view of the time which has elapsed, authorization at this time is needed to permit the first lock to be completed by 1970.

# KASKASKIA RIVER, ILL.

(S. Doc. 44, 87th Cong.)

*Location.*—The Kaskaskia River rises in Champaign County in eastern Illinois and flows southwesterly about 325 miles to the Mississippi at a point 60 miles downstream from St. Louis, Mo.

*Authority.*—Senate Public Works Committee resolution adopted August 17, 1954.

*Existing project.*—The original Federal improvement of the river for navigation by deepening to 3 feet to mile 12, and removing snags to mile 22, was abandoned in 1895. The river is not used by commercial craft at the present time. The existing Federal project for flood control and other purposes on the Kaskaskia River provides for dams and reservoirs at Carlyle and Shelbyville, and levees between Cowden and Vandalia, below Carlyle, and New Athens. Carlyle Reservoir is under construction and planning is underway on the Shelbyville project. Work has not started on the levees. The reservoirs, in addition to reducing flood flows, would aid navigation by augmenting flows in the Mississippi River, provide municipal and industrial water supply, benefit fish and wildlife, and afford opportunity for recreational developments.

*Navigation problem.*—Local interests desire a 9-foot navigation channel in the lower 50 miles of the Kaskaskia River to facilitate the out-bound movements of coal and grain, and to augment the local economy.

*Recommended plan of improvement.*—Provides for a channel 9 feet deep and 200 feet wide from the mouth of Kaskaskia River to Fayetteville, Ill., by enlarging the present channel where required, and making overbank cuts to eliminate sharp bends; and a dam at mile 4 with a single lock 84 feet wide and 600 feet long. The plan of improvement also provides for modification of the storage allocations in the Carlyle and Shelbyville Reservoirs, to provide water for Kaskaskia River navigation in lieu of Mississippi River navigation; and future reallocation of storage in the two reservoirs when additional water is needed for navigation, if the use of such storage is found by the Chief of Engineers to be feasible and more economical than pumping water from below the dam into the navigation pool.

*Estimated cost (price level, January 1960).*—

Federal.....	\$58, 200, 000
Non-Federal.....	2, 300, 000
Total.....	60, 500, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$2, 223, 300	\$119, 000	\$2, 342, 300
Maintenance and operation.....	270, 000	0	270, 000
Replacements.....	17, 700	0	17, 700
Navigation aids.....	19, 000	0	19, 000
Total.....	2, 530, 000	119, 000	2, 649, 000
Annual benefits: Transportation savings on coal movements.....			5, 120, 000



*Benefit-cost ratio.*—1.9.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way; hold and save the United States free from damages; make all necessary alterations to sewer, water supply, drainage, and other utility facilities; bear a proportionate share of the costs of relocations of railroad and highway bridges; remove one highway bridge at own expense; maintain all bridges over the improved waterway; provide necessary loading and mooring facilities; provide terminal and transfer facilities; and establish agency for controlling withdrawal of water from river below Carlyle Dam.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: No objection.

State of Illinois: Approves project.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget notes that the Acting Chief of Engineers refers to the uncertainty of railroad rate adjustments that may be proposed in the future and the action that the Interstate Commerce Commission may take thereon, and that he recommends, if the project is authorized, a reevaluation of project economic justification in light of rates then existing, would be made when funds are requested for construction. The Bureau of the Budget concurs in this recommendation. The Bureau of the Budget further advises that there would be no objection to the submission of the proposed report to the Congress.

#### HARBORS ON MISSISSIPPI RIVER (MOUTH OF MISSOURI RIVER TO MINNEAPOLIS)

(H. Doc. 513, 87th Cong.)

*Location.*—The harbors are located in communities in Minnesota, Wisconsin, Iowa, Illinois, and Missouri along the upper Mississippi River between the mouth of the Missouri River and Minneapolis, Minn.

*Authority.*—Resolution of the Committee on Public Works of the House of Representatives adopted April 22, 1947, and resolutions of the Committee on Public Works of the U.S. Senate adopted March 4, 1947, and August 26, 1955; River and Harbor Act of March 2, 1945; Flood Control Act approved July 24, 1946.

*Existing project.*—The Federal navigation project for the upper Mississippi River provides for a navigation channel of 9-foot depth between the Missouri River and Minneapolis to be obtained by construction of locks and dams supplemented by dredging. This depth is generally available as far upstream as St. Anthony Falls in Minneapolis where work is continuing. Authorized improvements also include 10 commercial barge harbors (5 completed) and 16 small boat harbors (12 completed). In addition to these, a number of mooring basins for small craft have been established by municipalities and clubs. Other local interests have constructed more modest facilities for serving recreational boats.



*Navigation problem.*—There is need for additional protected harbors at various localities along the Mississippi River for existing and future recreational and commercial fishing craft.

*Recommended plan of improvement.*—Provides for construction and maintenance of 14 small boat harbors and for maintenance of 1 existing small boat harbor at Quincy, Ill. The 15 harbors are listed below:

## Harbor:

Location on  
Mississippi River

Harriet Island, St. Paul, Minn.....	Mile 840.2.
Bay City, Wis.....	Mile 785.9.
Pepin, Wis.....	Mile 767.1.
Cassville, Wis.....	Mile 606.6.
Bellevue, Iowa.....	Mile 555.6.
Savanna, Ill.....	Mile 537.0.
Clinton, Iowa.....	Mile 518.8.
Moline, Ill.....	Mile 488.0.
Davenport, Iowa (Credit Island).....	Mile 478.7.
Andalusia, Ill.....	Mile 473.0.
New Boston, Ill.....	Mile 433.1.
Keokuk, Iowa.....	Mile 363.5.
Warsaw, Ill.....	Mile 359.1.
Quincy, Ill.....	Mile 327.3.
Grafton, Ill.....	Mile 218.5.

All of the above harbor channels would be dredged to a depth of 5 feet below minimum pool level. It is further recommended that construction of individual harbors be permitted whenever funds for the purpose are available and the prescribed local cooperation for the particular harbor has been furnished.

*Estimated cost.*—

Location	Federal	Non-Federal	Total	Non-Federal percent of Federal con- struction
St. Paul, Minn.....	\$7,000	\$7,000	\$14,000	50.0
Bay City, Wis.....	24,000	6,000	30,000	19.5
Pepin, Wis.....	151,000	24,000	175,000	13.6
Cassville, Wis.....	163,000	47,000	210,000	22.5
Bellevue, Iowa.....	78,000	37,000	115,000	32.4
Savanna, Ill.....	98,000	47,000	145,000	32.2
Clinton, Iowa.....	38,000	21,000	59,000	35.5
Moline, Ill.....	119,000	60,000	179,000	33.3
Davenport, Iowa.....	78,000	44,000	122,000	35.8
Andalusia, Ill.....	15,000	2,000	17,000	12.0
New Boston, Ill.....	20,000	4,000	24,000	15.8
Keokuk, Iowa.....	192,000	65,000	257,000	25.4
Warsaw, Ill.....	45,000	8,000	53,000	14.7
Quincy, Ill.....				
Grafton, Ill.....	177,000	177,000	354,000	50.0
Total.....	1,205,000	549,000	1,754,000	

*Project economics and benefit-cost ratio.—*

Location	Amortiza- tion and interest	Additional Federal annual maintenance	Total annual charges	Total annual benefits	Benefit-cost ratio
St. Paul, Minn.....	\$1,900	\$2,500	\$4,400	\$38,900	8.8
Bay City, Wis.....	1,500	2,500	4,000	18,100	4.5
Pepin, Wis.....	7,300	800	8,100	16,400	2.0
Cassville, Wis.....	8,300	1,000	9,300	16,200	1.7
Bellevue, Iowa.....	4,600	1,400	6,000	15,300	2.6
Savanna, Ill.....	6,000	2,900	8,900	23,600	2.7
Clinton, Iowa.....	2,600	2,500	5,100	30,400	6.0
Moline, Ill.....	7,300	800	8,100	14,100	1.7
Davenport, Iowa.....	5,200	3,000	8,200	23,600	2.9
Andalusia, Ill.....	700	500	1,200	8,800	7.3
New Boston, Ill.....	1,000	1,200	2,200	9,800	4.5
Keokuk, Iowa.....	10,100	700	10,800	17,500	1.6
Warsaw, Ill.....	2,000	1,100	3,200	14,600	4.6
Quincy, Ill.....	-----	5,000	5,000	21,300	4.1
Grafton, Ill.....	15,200	2,100	17,300	59,000	3.4
Total.....	-----	28,000	-----	-----	3.2

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of aids to navigation upon the request of the Chief of Engineers including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; hold and save the United States free from damages that may result from the construction and maintenance of the project; provide and maintain necessary mooring facilities and utilities, including a public landing with suitable supply facilities open to all on equal terms, and dredge berthing areas to a depth commensurate with the depth of the Federal channel improvement; reserve spaces within the anchorage and mooring facilities adequate for accommodation of transient small boats; accomplish such utility or other relocations or alterations as are necessary for project purposes; establish a competent and properly constituted public body empowered to regulate the use, growth, and free development of the harbor facilities with the understanding that said facilities will be open to all on equal terms; and make an equitable cash contribution toward the Federal first cost of each harbor development, the percentages and presently estimated amounts of which are listed in the table showing estimated costs. Local interests have indicated willingness and ability to comply with requirements.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Commerce: Favorable.

State of Minnesota: Favorable.

State of Wisconsin: Favorable.

State of Iowa: Favorable.

State of Illinois: Favorable.

State of Missouri: Favorable. However, due to local problems the Governor requested that further consideration of the harbors at Louisiana and Clarksville be delayed.

*Comments of the Bureau of the Budget.*—No objection to submission of report to Congress. However, the Bureau of the Budget notes that for none of the 14 new harbors recommended by the Chief of Engineers

is the Federal cost in excess of \$200,000. The Budget states that construction of these harbors could be accomplished under the provisions of section 107 of the 1960 River and Harbor Act without further action by the Congress.

#### ONTONAGON HARBOR, MICH.

(H. Doc. 287, 87th Cong.)

*Location.*—Ontonagon Harbor is located on the south shore of Lake Superior, 136 water miles east of Duluth-Superior Harbor, Minn. and Wis., and 274 water miles west of Sault Ste. Marie, Mich.

*Authority.*—Resolutions of the Committees on Public Works of the U.S. Senate and House of Representatives, adopted July 2, 1958 and July 16, 1958, respectively.

*Existing project.*—The existing Federal project, completed in 1938, provides for a channel 17 feet deep and 400 feet to 150 feet wide from the lake to the piers; a channel between the piers 150 feet wide, 17 feet deep in the outer 250 feet, thence 15 feet deep in the inner 2,200 feet; an inner basin 15 feet deep, 900 feet long, and up to 285 feet wide between limits 50 feet from existing wharves; and 4,990 feet of entrance piers. Channel maintenance since 1950 has been limited mainly to serving the needs of commercial fishing and other shallow-draft traffic.

*Navigation problem.*—Ontonagon Harbor is not suitable for use by modern Great Lakes vessels because of the limited project depth of 15 feet and the small maneuvering area in the inner harbor. The harbor presently affords safe vessel operation for only commercial fishing and other small craft.

*Recommended plan of improvement.*—Provides for a depth of 23 feet in the approach channel, with suitable widening, and in the outer 450 feet of the entrance channel; a depth of 22 feet in the next 1,150 feet of the entrance channel; a depth of 21 feet in the remainder of the entrance channel and in the basin to within 800 feet of the highway bridge; removal of the inner 955 feet of the west pier, and extension of the basin westward for 1,750 feet, at a depth of 21 feet and a minimum width of 200 feet; a sedimentation basin within the harbor, 30 feet deep, with a capacity of 155,000 cubic yards; reconstruction of the outer 370 feet of the east pier; and strengthening the remaining piers and raising them to an elevation 8 feet above low water, except the outer 96 feet of the west pier.

*Estimated cost (price level of September 1960).—*

Federal.....	\$4, 741, 000
Non-Federal.....	145, 000
Total.....	4, 886, 000

#### *Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$177, 000	\$7, 000	\$184, 000
Maintenance.....	35, 000		35, 000
Maintenance, navigation aids.....	1, 000		1, 000
Total.....	213, 000	7, 000	220, 000
Annual benefits:			
Transportation savings:			
Receipts.....			284, 800
Shipments.....			54, 400
Total.....			339, 200



*Benefit-cost ratio.*—1.5.

*Local cooperation.*—(a) Provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial subsequent disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; (b) hold and save the United States free from damages due to the construction and maintenance of the improvements; (c) accomplish without cost to the United States alterations or relocations as may be required of roads, structures, and utility facilities; (d) provide and maintain adequate public terminal and transfer facilities, open to all on equal terms, including dredging of berthing areas to depths commensurate with related project depths; and (e) prohibit bulkhead construction or other encroachment on the southerly shore in the harbor retained as a natural spending beach for waves. Local interests have indicated willingness and ability to meet requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: States that it is the opinion of that agency that the available record does not clearly indicate sufficient economic benefits to warrant its endorsement.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.*—States that while there would be no objection to the submission of the proposed review report on Ontonagon Harbor to the Congress, the Bureau of the Budget would expect that if the proposed improvement is authorized by the Congress it would be reexamined prior to submission of a request for funds to initiate its construction in the light of policies that may result from the current transportation review and of local conditions existing at that time.

#### MUSKEGON HARBOR, MICH.

(H. Doc. 474, 87th Cong.)

*Location.*—Muskegon Harbor is located on the eastern shore of Lake Michigan nearly opposite and 80 miles across the lake from Milwaukee, Wis.

*Authority.*—Senate and House Public Works Committee Resolutions adopted May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—Provides in general for an outer harbor formed by arrowhead breakwaters; an entrance channel 24 feet deep at entrance decreasing to 21 feet at the inner channel, thence an inner channel 21 feet deep extending to Muskegon Lake; for piers and revetments along the inner channel; and for repairing and maintaining the revetment around the old car-ferry slip.

*Navigation problem.*—The existing project depth is inadequate to accommodate vessels in the present and prospective fleet loaded to drafts commensurate with depths being provided in the Great Lakes connecting channels and the St. Lawrence Seaway.

*Recommended plan of improvement.*—Provides in general for a depth of 29 feet from deep water in Lake Michigan to a point about

1,000 feet landward of the ends of the breakwaters; thence a depth of 28 feet to the outer ends of the inner piers; thence a depth of 27 feet in the inner channel to Muskegon Lake; and for modification of the project limits to delete two triangular areas adjacent to the inner portion of the entrance channel and to reduce the project width in the inner channel from 240 feet to 200 feet.

*Estimated cost (price level of May 1960).—*

Federal.....	\$609, 000
Non-Federal.....	450, 000
Total.....	1, 059, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$22, 000	\$21, 000	\$43, 000
Maintenance and operation.....	5, 000		5, 000
Total.....	27, 000	21, 000	48, 000
Annual benefits:			
Transportation savings:			
Bulk cargo traffic.....			137, 700
General cargo traffic.....			88, 300
Total.....			226, 000

*Benefit-cost ratio.—4.7.*

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of aids to navigation, including suitable areas for initial and subsequent disposal of spoil and necessary retaining works therefor or the costs of such retaining works; hold and save the United States free from damages due to construction and maintenance of the improvements; and when and where needed, provide and maintain depths in berthing areas and access channels commensurate with the depths provided in the related project areas. Local interests have indicated a willingness and ability to comply with items of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### LELAND HARBOR, MICH.

(H. Doc. 413, 87th Cong.)

*Location.*—On the east shore of Lake Michigan, about 40 miles by water northeast of Frankfort, Mich.

*Authority.*—House Public Works Committee resolution adopted July 31, 1957, and Senate Public Works Committee resolution adopted February 8, 1957.

*Existing project.*—The Federal navigation project, completed in 1937, provides piers about 400 feet long, converging from shore to an entrance 60 feet wide; and an entrance channel 6 feet deep, 40 feet wide, and 300 feet long.



*Navigation problem.*—There is a need for additional anchorage area and greater protection for the locally based fishing fleet and mail-ferryboat and cruising recreational craft.

*Recommended plan of improvement.*—Construction of a break-water about 1,000 feet long, a protected anchorage and maneuvering area about 3 acres in extent and 10 feet deep, a flared approach channel 12 feet deep with minimum width of 140 feet, and removal of the existing north pier.

*Estimated cost (price level of February 1961).*—

Federal.....	\$485, 000
Non-Federal.....	285, 000

Total.....	770, 000
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*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$19, 000	\$12, 200	\$31, 200
Maintenance dredging.....	2, 500		2, 500
Maintenance to navigation aids.....	750		750
Total.....	22, 250	12, 200	34, 450
<b>Annual benefits:</b>			
Recreational.....			21, 400
Harbor of refuge:			
Recreational craft.....			10, 000
Commercial craft.....			5, 000
Commercial fishing.....			6, 500
Total.....			42, 900

*Benefit-cost ratio.*—1.2.

*Local cooperation.*—Contribute in cash 37 percent of the first cost of construction of the general navigation facilities due to benefits to recreational boating, such contribution, presently estimated at \$285,000, to be paid in a lump sum prior to initiation of construction and subject to final adjustment after actual costs have been determined; provide without cost to the United States, all lands, easements, and rights-of-way necessary for construction and subsequent maintenance of the project and of aids to navigation upon the request of the Chief of Engineers, including suitable areas as may be determined by the Chief of Engineers to be required for initial and subsequent disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor, or the cost of such retaining works; hold and save the United States free from damages due to the construction and maintenance of the project; provide and maintain without cost to the United States necessary mooring facilities and utilities, including a public landing with suitable supply facilities, open to all on equal terms; the dredging of berthing areas to be commensurate with the depth of the Federal channel improvements; establish a properly constituted and competent public body empowered to cooperate financially and to provide and operate essential local facilities; reserve spaces within the anchorage and mooring facilities adequate for the accommodation of transient craft; and maintain an adequate channel for



the commercial fishing fleet in the river upstream of the Federal improvement. The local interests are willing to furnish the items of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### LITTLE BAY DE NOC, GLADSTONE HARBOR, AND KIPLING, MICH.

(H. Doc. 480, 87th Cong.)

*Location.*—Little Bay de Noc is a northerly arm of Green Bay in the northwestern part of Lake Michigan. Gladstone is on the west shore of the bay, about 7.5 miles north of Escanaba. Kipling is on the north side of Gladstone Harbor.

*Authority.*—Resolutions of the Public Works Committees of the Senate and House of Representatives adopted August 18, 1959 and June 3, 1959, respectively, and section 109 of the River and Harbor Act of 1960.

*Existing project.*—The existing Federal project, completed in 1905, provided for dredging to a depth of 19 feet the approach to the then existing ore dock at Gladstone. No funds have been expended on the project since 1911 and, since the ore dock was abandoned many years ago, the project was recommended for abandonment in House Document No. 467, 69th Congress, 1st session. No action in respect to abandonment was taken by Congress.

*Navigation problem.*—The existing locally provided channel to Kipling is inadequate for tankers calling there.

*Recommended plan of improvement.*—It is recommended that the existing project for Gladstone Harbor, Mich., be abandoned and that a new project be authorized, providing for a channel 24 feet deep, 200 feet wide, and about 2,400 feet long from deep water in Little Bay de Noc to the Kipling waterfront, with suitable widening at the landward end to form a turning basin 550 feet wide and 24 feet deep.

*Estimated cost (price level, November 1961).*—

Federal.....	\$350, 000
Non-Federal.....	19, 000
Total.....	369, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$12, 900	\$900	\$13, 800
Maintenance.....	2, 000	200	2, 200
Navigation aids.....	100		100
Total.....	15, 000	1, 100	16, 100
Annual benefits: Transportation savings.....			79, 200

*Benefit-cost ratio.*—4.9.

*Local cooperation.*—Hold and save the United States free from damages due to the construction works and maintenance of the improvement; provide and maintain without cost to the United States depth in berthing areas commensurate with the depth provided in the related project area; and make terminal facilities for transfer of petroleum products at Kipling available to all on equal terms. It is the opinion of the district engineer that local interests are able and willing to meet the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of Interior: Favorable.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### GREEN BAY HARBOR, WIS.

(H. Doc. 470, 87th Cong.)

*Location.*—Green Bay Harbor is within the mouth of the Fox River at the south end of Green Bay, an arm of Lake Michigan.

*Authority.*—Similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956 and June 27, 1956, respectively.

*Existing project.*—Outer harbor entrance channel 10 miles long, 22 feet deep, and from 500 feet wide at outer end to 300 feet at Grassy Island; Fox River channel 22 feet deep to Chicago and North Western Railway bridge; turning basin 22 feet deep at mouth of East River; turning basin 20 feet deep above Chicago and North Western Railway bridge; and channel  $3\frac{1}{2}$  miles long, 18 feet deep, 150 feet wide from Chicago and North Western Railway bridge to DePere, terminating in a turning basin.

*Navigation problem.*—Lack of adequate depth to accommodate the vessels which will use the connecting channels and St. Lawrence Seaway and inadequate width in the lower harbor for turning vessels.

*Recommended plan of improvement.*—Provides generally for deepening the entrance channel in Green Bay to 26 feet from that depth in the bay to Grassy Island, at channel widths of 500 feet to Tail Point Light, thence 300 feet to Grassy Island; deepening the entrance channel to 24 feet from Grassy Island to a point 0.5 mile upstream at the presently authorized channel width of 300 feet; thence deepening the Fox River to 24 feet to a point 1,700 feet upstream from the Chicago & North Western Railway bridge, at existing channel widths; and dredging the authorized but unconstructed turning basin at the mouth of the East River to a depth of 24 feet for a maximum width of 1,000 feet; and further provides that the uncompleted part of the work authorized in 1945 be combined with the additional work recommended herein and the whole be treated as a single work item, with estimated cost of \$4,610,000 for construction, including \$340,000 for work previously authorized, and that this combination supersede the authorization for the uncompleted portion of the work authorized by the River and Harbor Act of 1945.

*Estimated cost (price level, June 1961).—*

Federal.....	\$4, 270, 000
Non-Federal.....	215, 000
<b>Total.....</b>	<b>4, 485, 000</b>

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$159, 500	\$9, 900	\$169, 400
Maintenance of channel.....	20, 000		20, 000
Maintenance, aids to navigation.....	1, 600		1, 600
<b>Total.....</b>	<b>181, 000</b>	<b>9, 900</b>	<b>191, 000</b>
<b>Annual benefits: Transportation savings.....</b>			<b>478, 000</b>

*Benefit-cost ratio.—2.5.*

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way for construction and subsequent maintenance, including suitable areas for initial and subsequent disposal of spoil and necessary retaining works therefor or the costs of such retaining works; hold and save the United States free from damages due to the construction and maintenance of the improvements; when and where necessary, provide and maintain depths between the new channel limits and terminal facilities commensurate with related project depths; and accomplish such alterations as required in sewer, water supply, drainage, and other utilities. Local interests have indicated willingness and ability to comply with these items of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

State of Wisconsin: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## KENOSHA HARBOR, WIS.

(H. Doc. 496, 87th Cong.)

*Location.*—Kenosha Harbor, Wis., on the western shore of Lake Michigan about 35 miles south of Milwaukee and 54 miles north of Chicago, Ill., is at the mouth of Pike Creek in the city of Kenosha. The areas tributary to Kenosha Harbor includes Kenosha County, parts of Racine and Walworth Counties, and a small area along the northern boundary of Illinois.

*Authority.*—Full response to House Committee on Public Works resolution adopted July 31, 1957; partial response to similar resolutions of Senate and House Committees on Public Works adopted May 18, 1956, and June 27, 1956, respectively; and in partial response to Senate Public Works Committee resolution adopted April 30, 1957.

*Existing project.*—The existing Federal project for Kenosha Harbor, completed in 1959, provides for (a) a detached breakwater 796 feet long, northeast of the harbor; (b) two parallel piers about 250 feet apart along the entrance channel, 1,077 feet and 1,872 feet in length for the north and south piers, respectively; (c) an entrance channel generally 400 feet wide lakeward from the piers and 200 feet wide be-



tween the piers, the channel being 2,750 feet long and 21 feet deep from that depth in the lake to an interior basin; (d) an interior basin 21 feet deep; and (e) a channel 21 feet deep, 70 feet wide, and 475 feet long extending northwest from the basin. The lake approach to the entrance channel has been deepened to 23 feet under the general provisions of section V of the River and Harbor Act of March 4, 1951.

*Navigation problem.*—Kenosha Harbor is a part of the Great Lakes navigation system which includes improvements to connecting channels between the lakes and to shipping and receiving harbors. Present harbor depths of 21 feet are not commensurate with the controlling depths currently being provided in the system and with those of the St. Lawrence Seaway to accommodate the vessels carrying oversea general cargo.

*Recommended plan of improvement.*—A lake approach channel 800 feet wide and 27 feet deep from the detached breakwater lakeward for a distance of about 2,800 feet; an approach channel 26 feet deep between the detached breakwater and the outer end of the north pier; and an entrance channel and inner basin 25 feet deep, exclusive of the northwesterly extension.

*Estimated cost (price level of July 1961).*—

Federal	\$673, 000
Non-Federal	
Total	673, 000

*Project economics.*—

Annual charges:	Federal
Interest and amortization	\$25, 200
Maintenance	5, 000
Total	30, 200
Annual benefits: Transportation savings in oversea general cargo	47, 300

*Benefit-cost ratio.*—1.6.

*Local cooperation.*—Hold and save the United States free from damages that may result from construction and maintenance of the improvement; and maintain without cost to the United States depths in berthing areas when and as required at docks adjacent to the area to be improved, commensurate with the recommended project depths.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Wisconsin: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### MANITOWOC HARBOR, WIS.

(H. Doc. 479, 87th Cong.)

*Location.*—West shore of Lake Michigan about 79 miles north of Milwaukee, Wis.

*Authority.*—Similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—The existing Federal project provides for an outer harbor protected by breakwaters with an entrance 425 feet wide: a channel 21 feet deep and 425 feet wide from deep water in the lake to the breakwaters, thence 650 feet wide through the outer harbor to

the river mouth; a channel 21 feet deep at varying widths for a distance of 1.7 miles up the Manitowoc River; removal of the old stub pier at the river entrance; and an approach channel 21 feet deep in the outer harbor to a proposed city terminal south of the south breakwater. The lake approach has been deepened to 23 feet under the general authority provided in section 5 of the River and Harbor Act of March 4, 1915.

*Navigation problem.*—Existing project dimensions are not adequate to accommodate present and prospective bulk cargo vessels serving the harbor.

*Recommended plan of improvement.*—Provide for an approach channel 25 feet deep and 800 feet wide from deep water in the lake to the breakwater entrance, a distance of about 2,600 feet; a depth of 23 feet over a width of 800 feet in the outer harbor, thence over the existing project widths in the river to Eighth Street; a depth of 22 feet over existing widths from Eighth Street to the upstream limit of the project; and elimination of the authorized channel in the south part of the outer harbor.

*Estimated cost (price level of July 1961).*—

Federal.....	\$719, 000
Non-Federal.....	193, 000
Total.....	912, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$26, 300	\$8, 900	\$35, 200
Maintenance dredging.....	3, 000		3, 000
Maintenance navigation aids.....	300		300
Total.....	29, 600	8, 900	38, 500
Annual benefits: Transportation savings.....			63, 600

*Benefit-cost ratio.*—1.7.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for initial dredging and subsequent maintenance of the improvement and for aids to navigation, including suitable areas for initial and subsequent disposal of spoil and necessary retaining works therefor or the costs of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvement; provide and maintain without cost to the United States depths in berthing areas and local access channels serving the terminals commensurate with the depths provided in the related project areas; and accomplish and maintain without cost to the United States such alterations as may be required by the Chief of Engineers in sewer, water supply, drainage, and other utility facilities. Local interests have indicated willingness and ability to comply with the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Wisconsin: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## MILWAUKEE HARBOR, WIS.

(H. Doc. 134, 87th Cong.)

*Location.*—Milwaukee Harbor is located on the west shore of Lake Michigan, 85 miles north of Chicago, Ill.

*Authority.*—Resolutions of the Senate and House Public Works Committees, adopted May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—Provides for two breakwaters, 19,625 feet in length, with an opening 500 feet wide; two piers at the Milwaukee River mouth, 358 to 552 feet apart; an entrance channel 21 feet deep, 2,850 feet long, and 600 feet wide outside the piers; together with various widths and depths.

*Navigation problem.*—Major problem is lack of adequate depth to accommodate vessels which will utilize the connecting channels and the St. Lawrence Seaway.

*Recommended plan of improvement.*—Provides for (a) an approach channel 30 feet deep and 800 feet wide, narrowing to 300 feet through the breakwater opening; (b) a depth of 28 feet in the entrance channel to the inner end of the piers, over existing project widths, but not nearer than 50 feet from either pier; (c) a depth of 28 feet in the outer harbor south of the entrance channel to East Bay Street extended, between limits 50 feet east of the pierhead line and 400 feet west of the breakwater; (d) and a depth of 27 feet in the Milwaukee River to within 100 feet of the centerline of the bridge at mile 0.34, over existing project widths, and the Kinnickinnic River to widths 160 feet of the centerline of the bridge at mile 1.0, not nearer than 75 feet from adjacent docks.

*Estimated cost (price level of January 1960).*—

Federal.....	\$1, 029, 000
Non-Federal.....	627, 000
<b>Total.....</b>	<b>4, 656, 000</b>

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$150, 000	\$24, 800	\$174, 800
Maintenance.....	16, 000		16, 000
<b>Total.....</b>	<b>166, 000</b>	<b>24, 800</b>	<b>190, 800</b>
Annual benefits: Transportation savings.....			1, 130, 000

*Benefit-cost ratio.*—5.9.

*Local cooperation.*—Local interests must agree to (a) hold and save the United States free from damages due to the construction and maintenance of the improvements; (b) accomplish all necessary alterations to existing structures and utility facilities; and (c) when and where necessary, provide and maintain depths and terminal facilities and in berthing areas commensurate with related project depths. Local interests have indicated willingness and ability to provide local requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Wisconsin: Favorable.

*Comments of the Bureau of the Budget.*—No objection.



## CALUMET HARBOR AND RIVER, ILL. AND IND.

(H. Doc. 581, 87th Cong.)

*Location.*—Calumet Harbor is at the south end of Lake Michigan, on the State line between Illinois and Indiana.

*Authority.*—Interim report is in partial response to similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—The existing Federal project for Calumet Harbor and River provides for an outer harbor protected by a breakwater 12,500 feet long; an approach channel 3,200 feet wide and 29 feet deep; an outer harbor channel and anchorage 3,000 feet wide and 28 feet deep; a channel in the river 290 feet wide and 27 feet deep up to the Elgin, Joliet, & Eastern Railway bridge, thence at least 200 feet wide and 25 feet deep to 111th Street, 23 feet to 114th Street, 21 feet to 122d Street, and 21.5 feet to and including turning basin No. 5; widening and straightening the river, except through the rock cut, to within 20 feet of bulkhead lines; five turning basins along the river; and closing the existing gap between the breakwaters. The existing project for Lake Calumet provides for dredging to a depth of 21 feet an area 670 feet wide and 3,000 feet long at the south end of the lake and an entrance channel 300 feet wide from Calumet River at turning basin No. 5.

*Navigation problem.*—Existing project depths are not adequate to allow vessels calling at points along the river and in Lake Calumet to be loaded to the drafts permitted by the Great Lakes connecting channels and the St. Lawrence Seaway. Widening in the rock section of the river, enlargement of turning basins and extension of the existing project are needed for safe navigation and development of the harbor.

*Recommended plan of improvement.*—Provides for: a depth of 27 feet in earth and 28 feet in rock over a minimum width of 200 feet in Calumet River from the Elgin, Joliet & Eastern Railway bridge to turning basin No. 5; widening the channel through the rock section of Calumet River, together with the presently authorized widening and straightening of the river, all to a depth of 27 feet in earth and 28 feet in rock; a depth of 27 feet over the authorized limits of turning Basin No. 1 on Calumet River; enlarging turning basin No. 5, and deepening the enlarged basins to 27 feet; elimination of turning basins Nos. 2 and 4; a depth of 27 feet within authorized limits to Lake Calumet and its entrance channel; and extending the existing project limits in Lake Calumet 3,000 feet northward at a width of 1,000 feet and a depth of 27 feet. Further, that the uncompleted work authorized in 1935 for the related river section be combined with the additional work now recommended for that section (exclusive of turning basins Nos. 2 and 4) and the whole be treated as a single further improvement, with estimated cost of \$13,479,000 for construction, including \$2,015,000 for work previously authorized and \$11,464,000 for additional work now recommended, and that this combination supersede the authorization for construction of the pertinent uncom-

pleted portion of the work authorized by the River and Harbor Act of 1935.

*Estimated cost (price level).—*

Federal.....	\$11, 464, 000
Non-Federal.....	12, 081, 000
<b>Total.....</b>	<b>23, 545, 000</b>

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$433, 000	\$560, 000	\$993, 000
Maintenance dredging.....	17, 000		17, 000
<b>Total.....</b>	<b>450, 000</b>	<b>560, 000</b>	<b>1, 010, 000</b>
Annual benefits: Transportation savings.....			2, 393, 000

*Benefit-cost ratio.—2.4.*

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the projects, including suitable areas required for initial disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvements; provide and maintain without cost to the United States depths in berthing areas commensurate with depths provided in the related project areas; accomplish without cost to the United States such alterations as may be required in docks, bulkheads, submarine utility facilities, and other structures; provide such bridge protection as may be required; and provide adequate bulkheads where required in connection with enlargement of the river channel and turning basins or, in lieu of such bulkheads, furnish releases saving the United States harmless against any claims for damages from erosion, bank losses, or other consequences of the work; and provided further that work on any separable feature may be undertaken independently of any other whenever funds for that feature are available and the pertinent local cooperation has been furnished.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

State of Illinois: Favorable.

State of Indiana: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

CHICAGO HARBOR, ILL.

(H. Doc. 485, 87th Cong.)

*Location.*—Chicago Harbor is near the south end of Lake Michigan, 14 miles northerly of the Illinois-Indiana State line, on the southwestern shore of the lake.

*Authority.*—Similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—The existing Federal project for Chicago Harbor generally provides for an inner breakwater, in two sections, inclosing an inner basin of about 224 acres; an exterior breakwater in three sections inclosing an outer basin of about 900 acres; maintenance dredging to a depth of 21 feet of a portion of the inner basin and also of the entrance to Chicago River to Rush Street over a varying width; and maintenance of a section of the north pier. The existing deep draft Federal project for Chicago River generally provides for maintenance dredging to 21 feet in the main river, the North Branch, the North Branch Canal, and the North Branch turning basin, all to within 20 feet of existing docks.

*Navigation problem.*—Existing project depths in the outer harbor are not adequate to permit vessels in the oversea traffic to take full advantage of the depth being provided in the connecting channels and the St. Lawrence Seaway.

*Recommended plan of improvement.*—Provide for a lake approach channel 800 feet wide and 29 feet deep from the breakwater lakeward for a distance of about 6,600 feet and a channel and maneuver area inside the harbor entrance with a maximum width of 1,300 feet and a depth of 28 feet.

*Estimate cost (price level of July 1961).—*

Federal.....	\$1, 505, 000
Non-Federal.....	None
Total.....	1, 505, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$57, 000	0	\$57, 000
Maintenance.....	11, 000	\$1, 000	12, 000
Total.....	68, 000	1, 000	69, 000
Annual benefits: Transportation savings.....			423, 000

*Benefit-cost ratio.*—6.1.

*Local cooperation.*—Hold and save the United States free from damages that may result from construction and maintenance of the improvement; and maintain, without cost to the United States, depths in berthing areas serving the public terminal commensurate with the recommended project depths. Local interests have indicated a willingness and ability to comply with the terms of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget.*—No objection.



## NEW BUFFALO HARBOR, MICH.

(H. Doc. 481, 87th Cong.)

*Location.*—New Buffalo Harbor is at the mouth of Galien River on the southeast shore of Lake Michigan, about 10 miles northeast of Michigan City, Ind., and 45 miles east of Chicago, Ill.

*Authority.*—Resolutions adopted by the Public Works Committee of the U.S. Senate and House of Representatives on June 20, 1957, and July 16, 1958, respectively.

*Existing project.*—A Federal navigation project adopted in 1852 provided for a revetted entrance channel 12 feet deep and 200 feet wide. Expenditures of \$83,000 to 1885, when all work was discontinued, resulted in a partially revetted channel 6 feet deep, 40 feet wide, and 1,400 feet long, which constitutes substantially the present channel. Since 1954, local interests have spent about \$58,000 for a timber jetty north of the entrance and channel improvements, and about \$270,000 for moorage facilities. They have under construction, or are planning, additional facilities at an estimated cost of \$144,000. A public ramp for boat launching is operated by the village of New Buffalo.

*Navigation problem.*—The entrance lacks protection against lake storms and the channel is subject to shoaling from shifting sandbars small-craft navigation hazardous. Local attempts at channel maintenance have been inadequate. Existing project provisions are not suitable for present and future needs.

*Recommended plan of improvement.*—Abandon the existing inactive project and construct new project providing for construction of two breakwaters, one extending lakeward for 1,400 feet from the shore northeast of the Galien River mouth, and the other for 860 feet from the shore on the southwest side; and dredging of a channel 10 feet deep, 80 to 180 feet wide, and about 850 feet long from the lake to the river mouth, thence 8 feet deep and 80 feet wide for 1,250 feet in the river.

*Estimated cost (price level of August 1961).*—

Federal.....	\$667, 000
Non-Federal.....	615, 000
<b>Total.....</b>	<b>1, 282, 000</b>

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$25, 500	\$28, 000	\$53, 500
Maintenance.....	21, 000		21, 000
Maintenance, aids to navigation.....	500		500
<b>Total.....</b>	<b>47, 000</b>	<b>28, 000</b>	<b>75, 000</b>
<b>Annual benefits:</b>			
Damages prevented.....			32, 400
Recreational boating.....			49, 200
Reduced local maintenance.....			16, 000
Increased commercial fish catch.....			4, 500
<b>Total.....</b>			<b>102, 100</b>

*Benefit-cost ratio.*—1.4.

*Local cooperation.*—Contribute, in cash, 48 percent of the first cost of construction of the general navigation facilities due to recreational boating benefits, such contribution, presently estimated at \$615,000, to be paid in a lump sum prior to initiation of construction, subject to final adjustment after actual costs have been determined; provide, without cost to the United States, all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and for aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil in a stockpile for beach nourishment; hold and save the United States free from damages due to the construction works and maintenance of the improvements; provide and maintain, without cost to the United States, necessary mooring facilities and utilities, including a public landing with suitable supply facilities open to all on equal terms, and including dredging of berthing areas to depths commensurate with the related project depths; and preserve mooring facilities adequate for the accommodation of transient craft. The net cost to the United States for the recommended improvements is estimated at \$667,000 for construction and \$21,000 annually for maintenance. The Michigan State Waterways Commission has expressed its support for the improvements and has offered to provide any required local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### CASEVILLE HARBOR, MICH.

(H. Doc. 64, 87th Cong.)

*Location.*—Caseville Harbor, about 40 miles northeasterly of Bay City, Mich., is at the mouth of Pigeon River on the east shore of Saginaw Bay, an arm of Lake Huron.

*Authority.*—Resolution of Public Works Committee, House of Representatives, adopted April 24, 1945.

*Existing project.*—There is no existing Federal project at Caseville.

*Navigation problem.*—Navigation by light-draft vessels cruising in the vicinity of the mouth of Pigeon River is adversely affected by frequent, severe northerly and northeasterly storms sweeping across long expanses of open water in Lake Huron. The presence of rocky reefs extending from the shore and from adjacent islands in the area, constitutes an additional hazard to small craft cruising near shore and greatly increases the sailing distance between sheltered areas.

*Recommended plan of improvement.*—Provides for constructing a breakwater, 1,300 feet long, extending northwesterly from the bay shore at the north side of the mouth of Pigeon River; and dredging an entrance channel, 10 feet deep and 500 feet wide from that depth in Saginaw Bay, decreasing to 80 feet in width at the outer end of the breakwater and extending riverward 100 feet at the same depth; thence a channel 8 feet deep and 80 feet wide to the river mouth, de-

creasing to 60 feet in width and extending upstream approximately 1,000 feet, with widening to 80 feet in the upper 300-foot reach to serve as a turning basin, all at the same depth.

*Estimated cost (price level of August 1959).—*

Federal.....	\$327, 000
Non-Federal.....	327, 000
Total.....	654, 000

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$12, 000	\$14, 000	\$26, 000
Maintenance and operation.....	2, 500		2, 500
Maintenance navigation aids.....	300		300
Total.....	14, 800	14, 000	28, 800
<b>Annual benefits:</b>			
Recreational boating.....			36, 700
Harbor of refuge.....			2, 000
Total.....			38, 700

*Benefit-cost ratio—1.3.*

*Local cooperation.*—Local interests must agree to: (a) contribute, in cash, 50 percent of the first cost of construction of the general navigation facilities comprising the channel and breakwater, such contribution presently estimated at \$327,000, to be paid in a lump sum prior to initiation of construction, subject to final adjustment after actual costs have been determined; (b) provide, without cost to the United States, all lands, easements, and rights-of-way necessary for construction and maintenance of the project; (c) hold and save the United States free from damages due to the construction and maintenance of the project; (d) provide and maintain, without cost to the United States, necessary mooring facilities, and utilities, including a public landing with suitable supply facilities, open to all on equal terms; the dredging of berthing areas to be commensurate with the depth of the Federal channel improvements; (e) establish a properly constituted and competent public body empowered to co-operate financially and to provide and operate essential local facilities; and (f) reserve spaces within the anchorage and mooring facilities adequate for the accommodation of transient craft; and provided further that, if it is determined in detailed studies that spoil disposal areas are needed, local interests agree to furnish, upon request of the Chief of Engineers, and without cost to the United States, any such areas required including such dikes, bulkheads, and embankments as may be necessary, for the initial dredging and subsequent maintenance. Local interests have indicated willingness to furnish local cooperation.

*Comments of State and Federal agencies.—*

Department of Interior: Favorable.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.*—No objection.



## SAGINAW RIVER, MICH.

(H. Doc. 544, 87th Cong.)

*Location.*—In Michigan on the east shore. Saginaw River flows 22 miles northward to the head of Saginaw Bay, a southwestern arm of Lake Huron.

*Authority.*—Similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—The Federal project provides for an entrance channel 350 feet wide and 24 feet deep in the river to the Detroit & Mackinac Railway bridge, thence 22 feet deep to Sixth Street, Saginaw, and thence 16.5 feet deep to the head of the river at Green Point, a total distance of 29 miles; and three turning basins: one 20 feet deep at Essexville, another 20 feet deep at Carrollton, and the third in Saginaw 15 feet deep. Also provides for elimination from the project of the existing entrance channel in the bay upon completion of the new channel.

*Navigation problem.*—Existing project dimensions are inadequate to accommodate present and prospective bulk- and general-cargo vessels serving the terminals along the river.

*Recommended plan of improvement.*—Provide for a channel 27 feet deep and 350 feet wide from deep water in Saginaw Bay for a distance of 14 miles to the angle in the channel near the river mouth; thence a channel 26 feet deep and 200 feet wide for a distance of 0.4 of a mile to the river mouth; thence a channel 25 feet deep and 200 feet wide for 2.8 miles up the river to the Detroit & Mackinac Railway bridge; a depth of 25 feet in the Essexville turning basin over a width of 600 feet, including a triangular extension of 500 feet at the downstream end; a turning basin 22 feet deep, 650 feet wide, and 6.2 acres in area, at river mile 8.8 near the airport; a depth of 22 feet over the present width of 200 feet for a distance of 2,800 feet in the channel upstream from the Sixth Street Bridge; and a turning basin 20 feet deep, 650 feet wide, and 6.2 acres in area upstream of the Sixth Street Bridge, at about mile 17.1.

*Estimated cost (price level of January 1962).*—

Federal.....	\$4, 780, 000
Non-Federal.....	110, 000
Total.....	4, 890, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$179, 300	\$5, 100	\$184, 400
Maintenance dredging.....	32, 000		32, 000
Maintenance aids to navigation.....	3, 000		3, 000
Total.....	214, 300	5, 100	219, 400
Annual benefits:			
Transportation savings.....			275, 700
Vessel turning cost savings.....			19, 100
Total.....			294, 800

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for initial dredging and subsequent maintenance of the improvement and for aids to navigation, including suitable areas for initial and subsequent disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the costs of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvements; provide and maintain without cost to the United States depths in berthing areas and dock approaches commensurate with the depths provided in the related project areas; and accomplish and maintain without cost to the United States such alterations as may be required by the Chief of Engineers in submarine utility facilities. Local interests have indicated they are willing and able to comply with the items of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### ROUGE RIVER, MICH.

(H.Doc. 509, 87th Cong.)

*Location.*—Rouge River is located in southeastern Michigan and it joins the Detroit River between the cities of Detroit and River Rouge, Mich.

*Authority.*—Partial response to similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956 and June 27, 1956, respectively. It is also in partial response to resolution of the Committee on Public Works, House of Representatives adopted on July 21, 1950.

*Existing project.*—Provides for a main channel 3 miles in length from the Detroit River through the short-cut canal to the turning basin just above Dix Avenue Bridge all 21 feet deep; and an older side channel from the Detroit River 1½ miles in length joining the main channel immediately upstream of the Detroit, Toledo & Ironton Railroad bridge of varying depths from 17 to 25 feet.

*Navigation problem.*—Present channel depths are inadequate to permit efficient use of modern vessels.

*Recommended plan of improvement.*—Provides for deepening to 25 feet and widening to suitable widths the main channel of the Rouge River from the Detroit River to just below the Jefferson Street Bridge; a turning basin at the junction of the old channel and the main channel 25 feet deep; and maintenance of those portions of the existing project outside the 25-foot channel limits.

*Estimated cost (price level of April 1962).—*

Federal.....	\$257, 000
Non-Federal.....	1, 240, 000
Total.....	1, 497, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$9, 900	\$57, 700	\$67, 600
Increased maintenance.....	5, 000	5, 000	10, 000
Total.....	14, 900	62, 700	77, 600
Annual benefits: Transportation savings.....			157, 300

*Benefit-cost ratio.—2.0.*

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way required for construction of the improvements upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial disposal of spoil, and also necessary dikes, bulkheads, and embankments therefor or the costs of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvements; provide and maintain at local expense adequate terminal and transfer facilities open to all on equal terms, to accommodate the commerce to be served by the improved channel; provide and maintain without cost to the United States depths in berthing areas commensurate with the depths provided in the related project areas; accomplish and maintain without cost to the United States such alterations as may be required in docks, bulkheads, and other structures, and take such measures as may be necessary to assure stability of banks adjacent to the project channel; and provide without cost to the United States such bridge protection as may be required.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## HURON HARBOR, OHIO

(H. Doc. 165, 87th Cong.)

*Location.*—Huron Harbor, Ohio, is at the mouth of the Huron River on the south shore of Lake Erie, about 47 miles west of Cleveland, Ohio.

*Authority.*—Interim report in partial response to resolutions of the Committees on Public Works of the U.S. Senate and House of Representatives, adopted May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—The existing Federal project provides for a channel from deep water in Lake Erie to the river entrance 25 feet deep in soft material and 26 feet deep in hard material; a pier on the west side of the channel and a breakwater on the east side of the channel 3,170 feet and 1,450 feet long, respectively; and enlargement



but not maintenance of a turning basin 19 feet deep adjacent to slip No. 2. Local interests have dredged and maintained the river channel and turning basin above the limits of Federal maintenance.

*Navigation problem.*—The present controlling depths in Huron Harbor are insufficient to accommodate modern vessels loaded with iron ore, grain, and coal, and desirous of using depths available in the connecting channels and the St. Lawrence Seaway. The turning basin at the upstream end of deep-draft navigation is too small for safe use by vessels larger than class 5. Storms from the northeasterly direction create turbulence in the harbor which hampers loading operations in the coal slip. These storms also interfere with vessels entering and leaving the harbor. The entrance channel is narrow and exposed and the stopping or checking distance is insufficient for the larger vessels entering the confined river channel.

*Recommended plan of improvement.*—Provides for an approach channel 400 feet at the outer end and 300 feet at the inner end and 29 feet deep extending from the lake to a point opposite the outer end of the east breakwater; an entrance channel 28 feet deep in soft material and 29 feet in hard, 300 feet wide at the outer end and 150 feet at the inner end, extending from the outer end of the east breakwater to slip No. 1 of the New York, Chicago & St. Louis Railroad Co.; a river channel 27 feet deep in soft and 28 feet in hard material, 120 feet wide at the outer end and 350 feet at the inner end extending from slip No. 1 to the turning basin; a turning basin 750 feet wide and 22 feet deep in hard and 21 feet in soft material; a detached breakwater 1,575 feet long approximately 2,000 feet lakeward of the outer end of the west pier; and abandonment of the lakeward end of the existing approach channel not included in the plan.

*Estimated cost (price level of August 1959).—*

Federal.....	\$8, 557, 000
Non-Federal.....	1, 080, 000
<b>Total.....</b>	<b>9, 637, 000</b>

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$319, 500	\$53, 600	\$373, 100
Maintenance and operation.....	59, 500	1—13, 000	46, 500
Maintenance, navigation aids.....	2, 200		2, 200
<b>Total.....</b>	<b>381, 200</b>	<b>40, 600</b>	<b>421, 800</b>
<b>Annual benefits:</b>			
Transportation savings.....			443, 000
Elimination of delays.....			6, 000
<b>Total.....</b>			<b>449, 000</b>

<sup>1</sup> Includes reduction of \$18,000 in non-Federal maintenance in the river channel and turning basin and an increase of \$5,000 non-Federal maintenance for slips Nos. 1 and 2.

*Benefit-cost ratio.—1.1.*

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project; hold and save the United States free from damages due to the construction and maintenance of the improvements; when and where necessary, dredge the areas between the Federal improvement and

terminal facilities to adequate depths; and, regulate mooring to any dock, bulkhead, or other structure on the west side of the river, to prevent interference with the turning and passage of vessels. Local interests have indicated willingness and ability to provide requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Ohio: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### CLEVELAND HARBOR, OHIO

(H. Doc. 527, 87th Cong.)

*Location.*—South shore of Lake Erie at mouth of Cuyahoga River.

*Authority.*—This interim report is in partial response to similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—The existing Federal project provides for an outer harbor, 5 miles long, 1,600 to 2,400 feet wide, protected by breakwaters; a main entrance 700 feet wide; two parallel piers 325 feet apart at the mouth of Cuyahoga River; a depth of 29 feet through the lake approach channel, depths of 19 to 28 feet in the outer harbor, and a depth of 27 feet up the river to the site of the former New York Central swing bridge, thence 23 feet to mile 5.8 in Cuyahoga River, with a turning basin 18 feet deep at mile 4.8; depths of 27 and 21 feet in Old River; and Federal participation in the cost of replacing seven railroad bridges over the Cuyahoga River, and one railroad bridge and one highway bridge over Old River.

*Navigation problem.*—Existing project depths are not adequate to permit vessels in the oversea general cargo and newsprint commerce calling at terminals in the east basin of the outer harbor section to load to the maximum safe drafts permitted by the Great Lakes connecting channels and St. Lawrence Seaway projects.

*Recommended plan of improvement.*—Provide for plan A, a depth of 27 feet in an area extending easterly about 3,800 feet from the existing 28-foot project area and southerly from the existing maintenance line on the north to a limit 75 feet north of the harbor line on the south, easterly of a line 800 feet east of the west end of the east breakwater, and 28 feet westerly of the line; and provide for plan B, a depth of 25 feet in a dock approach channel to the Nicholson Cleveland Terminal Co. pier, from the 25-foot depth contour to a limit 75 feet north of the pierhead line, 400 feet wide at the shoreward end and flared toward the lake. It is further recommended that: when the necessary conditions of local cooperation for either plan A or plan B have been fulfilled, construction may be initiated on that plan, irrespective of the status of local cooperation for the other plan; the uncompleted 25-foot channel through the east basin, authorized by the River and Harbor Act of July 3, 1958, be combined with the additional work recommended herein for plan A and treated as a single item of work; and the authority for dredging to 19 feet with provisional dredging to 23 feet in the remaining portion of the east basin and for



dredging the uncompleted portion of the channel in Cuyahoga River at the upstream limit of the Federal project be eliminated from the project.

*Estimated cost (price level, November 1961).—*

	Plan A	Plan B	Total
Federal.....	\$828,000	\$60,000	\$888,000
Non-Federal.....	100,000	82,000	182,000
Total.....	928,000	142,000	1,070,000

*Project economics.—*

	Plan A			Plan B		
	Federal	Non-Federal	Total	Federal	Non-Federal	Total
<b>Annual charges:</b>						
Interest and amortization.....	\$31,700	\$4,300	\$26,000	\$2,400	\$3,800	\$6,200
Maintenance dredging.....	15,000	2,000	17,000	5,000	2,500	7,500
Aids to navigation.....				300		300
Total.....	46,700	6,300	53,000	7,700	6,300	14,000
<b>Annual benefits:</b>						
Transportation savings:						
General cargo.....		252,000				
Newsprint.....					236,000	
Benefit-cost ratio.....		4.8			16.9	

*Local cooperation.*—Hold and save the United States free from damages due to the construction and maintenance of the improvement; when and where necessary dredge the areas between the channel limits and terminal facilities commensurate with the adjacent Federal project depth; provide the necessary terminal facilities to accommodate prospective commerce considered in the report of the district engineer; and control operations of the Burke Lakefront Airport to permit free and unrestricted navigation use of the west side of Lederer Terminal and terminals westerly therefrom and of the Nicholson Cleveland Terminal. The city of Cleveland and transportation interests directly concerned have indicated their willingness and ability to meet requirements of local cooperation.

*Comments of State and Federal agencies.*—

Department of Interior: Favorable.

State of Ohio: Favorable.

*Comments of Bureau of the Budget.*—No objection.

#### GREAT LAKES HARBORS—INTERIM REPORT ON CONNEAUT HARBOR, OHIO

(H. Doc. 415, 87th Cong.)

*Location.*—At the mouth of Conneaut River on the south shore of Lake Erie, about 73 miles northeast of Cleveland, Ohio.

*Authority.*—In partial response to similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively. It is also in full response to a House committee resolution adopted April 13, 1948, and in partial response to a House committee resolution adopted June 3, 1959.



*Existing project.*—Provides in general for two breakwaters totaling 9,640 feet in length, with an entrance channel 600 feet wide, and a gap in the west breakwater 100 feet wide; an east pier 1,008 feet long; a depth of 25 feet in soft and 26 feet in hard material in the eastern part of the outer harbor; and a depth of 20 feet over the triangular western part.

*Navigation problem.*—The existing channel dimension will not accommodate existing and prospective Great Lakes bulk vessels; there is a need to eliminate dangerous crosscurrents in the outer harbor; and there is a need for an outer harbor channel for commercial fishing craft.

*Recommended plan of improvement.*—Provides in general for depths of 28 to 29 feet in the eastern part of the outer harbor; depths of 22 to 23 feet in the western part of the outer harbor; depths of 27 to 28 feet for a distance of 2,450 feet in the Conneaut River with width varying from 300 to 180 feet; removal of the east pier and modifications of the southern outer harbor limits; extension of the east breakwater; an access channel 8 feet deep, 200 to 250 feet wide from the outer harbor to the city dock; that the uncompleted part of the authorized work be combined with work recommended and be treated as a single improvement; and provides further that the work may be accomplished on the main harbor or the city dock channel independently of the other.

*Estimated cost (price level, January 1961).*—

	Main harbor	Channel to city dock	Total
Federal.....	\$6,060,000	\$119,000	\$6,179,000
Non-Federal.....	180,000	5,200	185,200
Total.....	6,240,000	124,200	6,364,200

*Project economics.*—

	Main harbor		
	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$231,300	\$8,400	\$239,700
Maintenance and operation.....	52,000	—12,400	39,600
Total.....	283,300	—4,000	279,300
	Channel to city dock		
	Federal	Non-Federal	Total
Interest and amortization.....	\$4,400	\$300	\$4,700
Maintenance and operation.....	10,200	500	10,700
Total.....	14,600	800	15,400
	Main harbor	Channel to city dock	
Annual benefits:			
Delays and damages prevented.....	\$54,000	-----	
Savings in transportation.....	1,313,000	-----	
Commercial fishing.....			\$40,400
Total.....	1,367,000		40,400

*Benefit-cost ratio.*—Main harbor, 4.9; channel to city dock, 2.6.

*Local cooperation.*—Provide all lands, easements, and rights-of-way; hold and save the United States free from damages; provide and maintain depths in berthing areas commensurate with related project areas; and accomplish alterations as required. Local interests have indicated willingness and ability to meet the requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Ohio: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### ERIE HARBOR, PA.

(H. Doc. 340, 87th Cong.)

*Location.*—Erie Harbor, Pa., is located on the south shore of Lake Erie about 78 miles southwest of Buffalo, N.Y., and is in a landlocked bay formed by Presque Isle Peninsula and the mainland.

*Authority.*—Similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—The existing Federal project provides for piers and a breakwater at the harbor entrance; an entrance channel 29 feet deep; a basin and channel 28 to 29 feet deep extending within 50 feet of the harbor line opposite the iron ore dock; two basins, one 21 feet deep and the other 18 feet deep; and an inner channel and basin 23 feet deep. Local interests constructed part of an original breakwater and have provided terminal facilities, access channels, and slips for deep-draft vessels.

*Navigation problem.*—Harbor depths are inadequate for traffic now using the St. Lawrence Seaway and Great Lakes connecting channels.

*Recommended plan of improvement.*—Provides for a depth of 27 feet in soft material and 28 feet in hard material in the area in front of the Duquesne Marine Terminal; and further provides that the uncompleted part of the work authorized in 1935 be combined with the additional work recommended herein and the whole be treated as a single work item, with estimated cost of \$699,000 for construction, including \$28,000 for work previously authorized, and that this combination supersede the authorization for the uncompleted portion of the work authorized by the River and Harbor Act of 1935.

*Estimated cost (October 1960 price level).*—

Federal.....	\$671, 000
Non-Federal.....	
Total.....	671, 000

#### *Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$26, 000		\$26, 000
Maintenance and operation.....			
Total.....	26, 000		26, 000
Annual benefits: Transportation savings.....			58, 000

*Benefit-cost ratio.—2.2.*

*Local cooperation.*—Hold and save the United States free from damages due to the construction and maintenance of the improvement; and maintain depths in the berths adjacent to the Duquesne Marine Terminal and in the connecting waters, thence to the Federal project, comparable to those in the related Federal project area. Local interests have indicated willingness and ability to furnish requirements.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

State of Pennsylvania: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## BUFFALO HARBOR, N.Y.

(H. Doc. 451, 87th Cong.)

*Location.*—Buffalo Harbor is located at the eastern end of Lake Erie.

*Authority.*—Senate and House Public Works Committee resolutions adopted May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—Provides in general for an outer harbor, protected by breakwaters, with depths ranging from 23 to 28 feet with two entrance channels and an inner harbor consisting of Buffalo River and Buffalo ship canal with depths of 22 to 23 feet.

*Navigation problem.*—The existing project depths are not commensurate with depths being provided in the Great Lakes connecting channels and St. Lawrence Seaway.

*Recommended plan of improvement.*—Provides in general for deepening the outer harbor to 27 feet over a 500-foot width for a distance of 2,500 feet northward from the 28-foot project area with varying widths for a distance of 1,700 feet and continuing for 7,000 feet; eliminate from the existing project the strip 25 feet wide between the presently authorized and the recommended easterly dredged limits; elimination of the easterly 50 feet of existing project extending from the proposed 27-foot depth area to the Buffalo River entrance channel; and that the uncompleted authorized work (estimated Federal cost, \$313,500) be combined with the recommended work (estimated Federal cost, \$2,796,500) at a total estimated cost of \$3,110,000.

*Estimated cost (price level of July 1961).—*

Federal.....	\$2, 796, 500
Non-Federal.....	300, 000
Total.....	3, 096, 500

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$102, 100	\$10, 900	\$113, 000
Maintenance and operation.....	18, 100	1, 500	19, 600
Total.....	120, 200	12, 400	132, 600
Annual benefits: Transportation savings.....			211, 100



*Benefit-cost ratio.*—1.6.

*Local cooperation.*—Provide without cost to the United States suitable areas for initial disposal of spoil, and necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvement; and, provide and maintain without cost to the United States depths in berthing areas commensurate with the depth provided in the related project area.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of New York: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### GREAT SODUS BAY HARBOR, N.Y.

(H. Doc. 138, 87th Cong.)

*Location.*—Great Sodus Bay Harbor is in Great Sodus Bay on the south shore of Lake Ontario, about 31 miles east of Rochester, N.Y., and 29 miles west of Oswego, N.Y.

*Authority.*—Resolutions of the Committees on Public Works of the U.S. Senate and House of Representatives adopted May 18, 1956, and June 27, 1956, respectively.

*Existing project.*—The existing Federal project, completed in 1940, provides for a channel 22 feet deep and 300 feet wide from the lake to the outer pierheads, thence 20 feet deep and 200 to 300 feet wide to deep water in the bay. The project includes two parallel entrance piers 450 feet apart, and two breakwaters inshore of the piers. The River and Harbor Act approved August 30, 1935, required the Pennsylvania Railroad Co. to dredge and maintain a channel 20 feet deep and of suitable width from deep water in the bay to its coal shipping dock, with a turning basin at the dock. The company presently maintains a channel 21 feet deep, 150 feet wide, and about one-half mile long, with a turning basin about 700 feet wide.

*Navigation problem.*—The principal navigation problem at Great Sodus Bay Harbor is lack of adequate depth to permit use of maximum draft by the large bulk cargo vessels engaged in carrying coal.

*Recommended plan of improvement.*—Provides for modification of the existing project for Great Sodus Bay Harbor, N.Y., to provide for a depth of 25 feet over a width of 300 feet in the approach channel from the lake to the piers; a depth of 24 feet over a width of 200 feet between piers; thence over a width of 450 feet to deep water bayward of the piers; and a channel 22 feet deep and 200 feet wide from deep water in the bay to the turning basin at the coal dock.

*Estimated cost (July 1959 price level).—*

Federal.....	\$765, 000
Non-Federal.....	314, 000
Total.....	1, 079, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$29, 500	\$14, 700	\$44, 200
Increased maintenance.....	16, 300	0	16, 300
Total.....	45, 800	14, 700	60, 500
Annual benefits: Transportation savings.....			198, 000

*Benefit-cost ratio.—3.2.*

*Local cooperation.*—Provided that prior to construction, local interests agree to (a) hold and save the United States free from damages due to the construction and maintenance of the improvements; (b) provide and maintain a turning basin at the coal dock, 22 feet deep and generally 800 feet wide; (c) provide and maintain a depth of 22 feet over a width of 75 feet in the berthing areas at the coal dock; and (d) provide adequate coal handling facilities as needed to serve the prospective coal commerce. Local interests have indicated willingness and ability to provide requirements.

*Comments of the State and Federal agencies.*—

State of New York: Favorable.

Department of Interior: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

OSWEGO HARBOR, N.Y.

(H. Doc. 471, 87th Cong.)

*Location.*—Oswego Harbor, N.Y., is near the easterly end of the south shore of Lake Ontario at the mouth of Oswego River.

*Authority.*—Similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956 and June 27, 1956, respectively.

*Existing project.*—The existing Federal project for Oswego Harbor generally provides for an outer harbor formed by a system of breakwaters comprising an outer west breakwater connected with the shore, a west arrowhead breakwater, an east arrowhead breakwater, and an outer east breakwater connected with the shore; a depth of 21 feet in soft material and 22 feet in hard material in the outer harbor between the arrowhead breakwaters, in the west outer harbor, and between the harbor lines in the Oswego River north of the north line of Seneca Street; a channel 250 feet wide in the east outer harbor and an irregularly shaped basin at the easterly end, with depths of 18 feet in soft material and 19 feet in hard material; maintenance of 145 feet of the west inner breakwater; and a detached breakwater 850 feet long at the harbor entrance and the removal of shoals to a depth of 25 feet below low-water datum in the approach to the entrance. Two project features have been designated as inactive—the east outer harbor and

the triangular section along the harbor line east of the Oswego River.  
*Navigation problem.*—Existing project depths are inadequate to accommodate vessels capable of utilizing the depths in the Great Lakes connecting channels and the St. Lawrence Seaway.

*Recommended plan of improvement.*—Provide for a depth of 27 feet in the lake approach channel from deep water in Lake Ontario to the entrance gap in the existing arrowhead breakwaters; a depth of 25 feet in a channel generally 800 feet wide through the outer harbor from the entrance gap terminating in a turning basin about 750 feet by 1,100 feet in size at the mouth of Oswego River with a depth of 25 feet; a depth of 24 feet in earth and 25 feet in hard material in a channel in Oswego River from the turning basin to the upstream end of the Port of Oswego Authority's east side terminal, a distance of about 1,600 feet, the limits of the channel to be parallel to and 50 feet channelward of the established U.S. harbor lines; relocation of the Federal project limits in Oswego River between the upstream end of the Port of Oswego Authority's east side terminal and the upstream limit of the Federal project, at the north line of West Seneca Street, on lines parallel to and 50 feet channelward of the established U.S. harbor lines; elimination from the Federal project of maintenance of the west inner breakwater; and elimination from the Federal project of the modification authorized by the River and Harbor Act of June 30, 1948, consisting of the construction of an outer east breakwater 4,900 feet long, removal of about 1,020 feet of the shoreward end of the existing east breakwater, provision of a channel generally 250 feet wide with an irregularly shaped basin at its easterly end with depths of 18 feet in soft material and 19 feet in hard material.

*Estimated cost (price level of November 1961).*—Federal, \$1,180,000.

*Project economics.*—

Annual charges:		Federal
Interest and Amortization	-----	\$44, 200
Maintenance Dredging	-----	4, 000
Maintenance of navigation aids	-----	500
Total	-----	48, 700
Annual benefits: Transportation savings	-----	99, 800

*Benefit-cost ratio.*—2.0.

*Local cooperation.*—Provide the necessary terminal and cargo handling facilities to accommodate vessels engaged in traffic in aluminum and general cargo; when and where necessary, dredge and maintain the areas between the Federal improvement and terminal facilities to adequate depths; and hold and save the United States free from claims for damages due to the construction and maintenance of the improvement. The Port of Oswego Authority has indicated its willingness to comply with the items of local cooperation.

*Comments of States and Federal agencies.*—

Department of the Interior: Favorable.

State of New York: Favorable.

*Comments of the Bureau of the Budget.*—No objection.



## DANA POINT HARBOR, CALIF.

(H. Doc. 532, 87th Cong.)

*Location.*—Dana Point, Calif., is on the coast in southern Orange County. It is about 40 miles southeast of Los Angeles-Long Beach Harbor and about 60 miles northwest of San Diego Harbor. The site of the considered harbor is in a sheltered cove in the lee of Dana Point, a precipitous promontory about 220 feet high.

*Authority.*—Public Law 14, 79th Congress, approved March 2, 1945.

*Existing project.*—There is no existing Federal project at Dana Point. Since 1956, local interests have provided a paved access road, about two acres of filled land protected from wave action by stone revetment, a 300-foot long concrete pile-trestle pier, and public facilities, at an estimated cost of \$350,000.

*Navigation problem.*—Local interests state that small craft harbor is needed in the area, not only for pleasure boating but also as a refuge for small craft during bad weather.

*Recommended plan of improvement.*—An entrance channel 500 feet wide, 2,000 feet long, and 20 to 15 feet deep; a main channel 400 feet wide, 3,250 feet long, and 15 to 10 feet deep; an east channel 250 feet wide, about 700 feet long, and 10 feet deep; an anchorage area 350 feet wide, about 600 feet long and 10 feet deep; a turning basin 450 feet wide, 500 feet long, and 10 feet deep; a west breakwater 5,400 feet long; and an east breakwater 2,340 feet long.

*Estimated cost (1961 price level).*—

Federal.....	<sup>1</sup> \$3, 730, 000
Non-Federal.....	<sup>2</sup> 3, 730, 000
Total.....	7, 460, 000

<sup>1</sup> Excludes \$30,000 for preauthorization studies and \$24,000 for aids to navigation.

<sup>2</sup> Cash contribution.

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$138, 000	\$174, 000	\$312, 000
Maintenance and operation.....	60, 000		60, 000
Total.....	198, 000	174, 000	372, 000
<b>Annual benefits:</b>			
Recreational boating.....			856, 000
Sport fishing.....			4, 000
Total.....			860, 000

*Benefit-cost ratio.*—2.3.

*Local cooperation.*—Contribute in cash 50 percent of the first cost of construction of the general navigation facilities; provide all lands, easements, and rights-of-way necessary for construction and subsequent maintenance of the project and of aids to navigation; hold and save the United States free from damages; provide and maintain adequate service frontage and public landing with suitable supply facilities, necessary mooring facilities and utilities, and access roads, parking areas, and other necessary public-use shore facilities; the first phase of development to be completed within 5 years, and full development within 15 years, after completion of the general navigation facil-

ities; operate a general anchorage area and/or mooring facilities having reserved spaces adequate for accommodation of transient boat traffic and for refuge; secure and hold in the public interest all lands bordering the development to a width sufficient for proper functioning of the harbor. Orange County Board of Supervisors has indicated willingness to provide the necessary local cooperation.

*Comments of State and Federal Agencies:*

Department of the Interior: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget:* No objections.

SANTA BARBARA HARBOR, CALIF.

(H. Doc. 518, 87th Cong.)

*Location.*—The harbor is on the coast of southern California about 90 miles northwest of Los Angeles.

*Authority.*—Resolution by House Committee on Rivers and Harbors and House Public Works Committee adopted March 19, 1946, and June 11, 1952, respectively.

*Existing project.*—Federal participation in existing project consists of \$30,000 annual contribution toward operation of sand-intercepting plant. Local interests maintain an existing harbor comprising about 84 acres to depths varying from zero to 21 feet, and a 1,500 foot long entrance channel to at least 15 feet deep.

*Navigation problem.*—Present harbor inadequate and unsafe for operation of increasing number of boats.

*Recommended plan of improvement.*—Construction of 4,600 feet of additional breakwater; a 1,200 feet by 400 feet wide entrance channel, 20 feet deep; a turning basin 1,000 feet by 500 feet, 20 feet deep; three channels totaling 2,600 feet in length and 15 feet deep; and an anchorage area.

*Estimated cost (July 1961 price level).*—

Federal.....	<sup>1</sup> \$3, 000, 000
Non-Federal.....	<sup>2</sup> 2, 900, 000
Total.....	5, 900, 000

<sup>1</sup> Excludes \$39,700 for preauthorization studies, and \$37,000 for aids to navigation.

<sup>2</sup> Includes \$2,890,000 cash contribution.

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$111, 000	\$135, 000	\$246, 000
Maintenance and operation.....	<sup>1</sup> 89, 000		89, 000
Navigation aids.....	1, 000		1, 000
Total.....	201, 000	135, 000	336, 000
<b>Annual benefits:</b>			
Recreational.....			838, 300
Commercial fishing.....			19, 000
Elimination of boat damage.....			5, 200
Total.....			862, 500

<sup>1</sup> In addition to \$30,000 under existing project.

*Benefit-cost ratio.*—2.6.

*Local cooperation.*—(a) Contribute in cash 49 percent of the first cost of the general navigation facilities, such contribution, presently estimated at \$2,890,000, to be paid in a lump sum prior to initiation of construction; (b) provide without cost to the United States all lands, easements, and rights-of-way; including suitable areas for initial and subsequent disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefor or the cost of such retaining works; (c) repair and seal the existing west breakwater in accordance with plans approved by the district engineer, and subsequent thereto transfer ownership of the breakwater to the United States; (d) remove a portion of the Stearns wharf and make such other alterations or relocations as may be required for the navigation improvements; (e) hold and save the United States free from damages; (f) provide and maintain without cost to the United States necessary mooring facilities and utilities including a public landing with suitable supply facilities open to all on equal terms in accordance with plans approved by the Chief of Engineers, the first phase of development to be completed within 5 years after completion of the general navigation facilities and full development to be completed within 15 years; (g) provide or arrange for suitable marine repair facilities; (h) secure and hold in the public interest all lands bordering the development to a width sufficient for proper functioning at the harbor; (i) construct at their own expense the sand fillet east of the harbor concurrently with construction of the east breakwater to assure continued replenishment of beach sands to the downdrift beaches; and (j) bear any additional costs for replenishment of beach sand east of the harbor over the cost of maintenance dredging required for the general navigation features. Local interests have indicated willingness to furnish requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### OAKLAND HARBOR, CALIF., FRUITVALE AVENUE BRIDGE

(S. Doc. 75, 87th Cong.)

*Location.*—Oakland Harbor is located on the east shore of San Francisco Bay, opposite the Golden Gate passage to the Pacific Ocean. This report considers a highway and a railroad bridge at Fruitvale Avenue.

*Authority.*—Resolution of Public Works Committee, U.S. Senate, adopted May 12, 1950.

*Existing project.*—The existing Federal navigation project provides in general for a total channel length of 8½ miles from San Francisco Bay to San Leandro Bay, varying in width from 800 feet to 275 feet and varying in depth from 35 feet to 25 feet. The project is complete except for deepening the tidal canal above the Park Street Bridge to 25 feet.

*Problem.*—To determine whether the Federal Government should replace the present federally owned two-lane Fruitvale highway bridge with a modern bridge adequate for the authorized 25-foot navigation project in the tidal canal.



*Recommended plan of improvements.*—Modification of the existing project for Oakland Harbor, Calif., to provide for Federal participation in the reconstruction of the highway bridge across the tidal canal at Fruitvale Avenue to the extent of providing a two-lane, movable bridge adequate for the authorized 25-foot navigation project.

*Estimated cost (price level of June 1959).*—

Federal.....	\$1, 750, 000
Non-Federal.....	695, 000
Total.....	2, 445, 000

*Justification.*—It is considered that the Federal Government should share in the cost of replacing the highway bridge in recognition of the fact that the United States will be required to replace the existing bridge in the near future or continue to spend exceedingly high amounts for maintenance. The recommendations are considered to be equitable under present Federal policy in regard to replacement of bridges over navigable waterways, and proposed improvements of existing waterways.

*Local cooperation.*—Provided local interests (a) construct the approaches; (b) make the necessary utility changes; and (c) upon completion of construction, take over the railroad and highway bridges and their approaches for operation, maintenance, and subsequent replacement in accordance with regulations satisfactory to the Secretary of the Army. Local interests are unwilling to cooperate on this basis.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

*State of California.*—The department of water resources indicates that the State of California is not involved in the financing of the proposed project since no flood control is involved. The district attorney of Alameda County, however, feels, that the recommendations of the Chief of Engineers impose undue burdens on the local people. The county questions the equity of the requirements that local interests make the necessary utility changes and take over the railroad and highway bridges for operation, maintenance, and subsequent replacement.

*Comments of the Bureau of the Budget.*—Although the Bureau of the Budget notes that local interests are unwilling to cooperate on the basis recommended by the Acting Chief of Engineers, it concurs in his view that local interests should have the opportunity to resolve the problem of the Fruitvale Avenue Bridge at such time as they are willing to meet the requirements of local cooperation. The Bureau of the Budget states that there would be no objection to the submission of this report to the Congress.

OAKLAND HARBOR, CALIF.

(H. Doc. 353, 87th Cong.)

*Location.*—Oakland Harbor is on the eastern side of San Francisco Bay, about 9 miles from the Golden Gate.

*Authority.*—House Public Works Committee resolution adopted March 30, 1955.

*Existing project.*—The existing Federal project for Oakland Harbor provides for: a channel 35 feet deep and 600 to 950 feet wide from deep water in San Francisco Bay to the Army base in the outer harbor, including a turning basin; a channel 30 feet deep and 275 to 800 feet wide through the inner harbor and Brooklyn Basin to Park Street on the tidal canal, thence 25 feet deep and 275 feet wide to San Leandro Bay, plus certain widened areas and a turning basin 30 feet deep a channel 25 feet deep and 300 feet wide at the north end of Brooklyn Basin; parallel jetties at the inner harbor entrance. The project is complete except for deepening the tidal canal above Park Street from 18 to 25 feet.

*Problem.*—Under existing conditions vessels with drafts of 28 to 34 feet cannot operate in the inner harbor at all tidal stages.

*Recommended plan of improvement.*—Modification of the existing project to provide for a depth of 35 feet in the existing inner harbor channels and tidal canal to Park Street, including the triangular area and turning basin in the Brooklyn Basin, and the widened areas except that, in front of the Grove and Market Street piers, the 35-foot depth would extend only to within 75 feet of the pierhead line; and a depth of 35 feet in the north channel of Brooklyn Basin for a distance of 1,300 feet.

*Estimated cost (price level of July 1961).<sup>1</sup>*—

Federal.....	\$6, 775, 000
Nonfederal.....	1, 200, 000
Total.....	7, 975,000

<sup>1</sup> See Remarks.

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$207, 700	\$54, 700	\$262, 400
Maintenance.....	28, 000	18, 000	46, 000
Total.....	235, 700	72, 700	308, 400
Annual benefits: Savings in vessel operating costs.....			560, 000

*Benefit-cost ratio.*—1.8.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way necessary for construction and maintenance of the improvement; hold and save the United States free from damages to wharves, piers, tubes, and other marine and submarine structures due to initial dredging and subsequent maintenance; accomplish without expense to the United States alterations as may be required in sewer, water supply, drainage, and other utility facilities; provide and maintain at local expense adequate public terminal and transfer facilities, open to all on equal terms; and deepen and maintain slips and berths when and as required; and provided further that, if it is determined in detailed studies that spoil disposal areas are needed, local interests agree to furnish, upon request of the Chief of Engineers, and without cost to the United States, the required spoil disposal areas including necessary dikes, bulkheads, and embankments for the initial dredging and subsequent maintenance. Local interests have indicated willingness to furnish requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior : Favorable.

State of California : Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—At the time the Oakland Harbor report was being prepared it was considered desirable to dispose of dredge spoil in deep water in San Francisco Bay just west of Yerba Buena Island. However, studies being made at the time have been completed and reveal the undesirability of using San Francisco Bay and tributary waters as disposal areas for dredge spoils. Accordingly, local interests will be required to provide onshore disposal areas. The current cost estimates are based on July 1961 prices, use of pipeline dredge, and onshore disposal of spoil, and are in lieu of the previous Federal and local costs of \$4,716,000 and \$224,000, respectively, based on November 1958 prices.

NOYO RIVER AND HARBOR, CALIF.

(S. Doc. 121, 87th Cong.)

*Location.*—Noyo River flows into the Pacific Ocean about 140 miles north of San Francisco, Calif. The cove at the mouth of the river forms Noyo Harbor with depths ranging up to 50 feet.

*Authority.*—Resolution of the Committee on Public Works of the U.S. Senate adopted September 7, 1961.

*Existing project.*—An existing Federal project provides for a south breakwater 1,100 feet long at the harbor entrance, two jetties at the entrance to Noyo River, a 10-foot deep channel, 100 and 150 feet wide and 0.7 mile long and a mooring basin 10 feet deep at the upper end of the channel. The breakwater, upper 400 feet of channel, and the mooring basin have not been constructed.

*Navigation problem.*—Local interests desire additional breakwaters to reduce wave action in the harbor, and a 30-foot channel, anchorage and turning basin to permit commercial shipping of lumber and petroleum products.

*Recommended plan of improvement.*—Construction of a breakwater 500 feet long at the north entrance to the harbor in addition to the authorized 1,100-foot breakwater. This would provide a protected harbor with adequate depth to allow use by oceangoing lumber barges and deep-draft vessels.



*Estimated cost (1962 price level).—*

Federal.....	\$13, 231, 000
Non-Federal.....	<sup>1</sup> 337, 000
<b>Total.....</b>	<b><sup>2</sup> 13, 568, 000</b>

<sup>1</sup> Includes \$325,000 cash contribution.<sup>2</sup> Includes cost of both recommended and authorized breakwaters.*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$396, 000	\$15, 000	\$411, 000
Maintenance and operation.....	133, 000		133, 000
Maintenance navigation aids.....	3, 000		3, 000
<b>Total.....</b>	<b>532, 000</b>	<b>15, 000</b>	<b>547, 000</b>
<b>Annual benefits:</b>			
Transportation savings.....			357, 000
Commercial fishing.....			78, 000
Recreational fishing and boating.....			35, 000
Area redevelopment benefits.....			113, 000
<b>Total.....</b>			<b>583, 000</b>

*Benefit-cost ratio.—1.1.*

*Local cooperation.*—Contribute in cash 2.4 percent of construction cost; provide all lands, easements, and rights-of-way; hold and save the United States free from damages; and provide adequate terminal and transfer facilities; such facilities to be constructed prior to or concurrently with the breakwaters. Local interests are interested in co-operating in the improvements.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Commerce: Favorable. The Area Redevelopment Administration advises that this project is extremely important to the overall economic development of Mendocino County. Construction of the project would lead to substantial employment in the lumber, fishing, and fish-processing industries. Substantial unemployment now existing in Mendocino County adds an urgency to the need for the project.

State of California: Favorable.

*Comments of the Bureau of the Budget.*—Subject to consideration of the following comments there would be no objection to submission of the report. The Bureau would expect that if the project is authorized, the corps would, prior to any request for appropriation, re-evaluate the economic justification based upon the appropriate interest rate at that time and reflecting further consideration to the appropriate economic life of its various facilities.

## COLUMBIA AND LOWER WILLAMETTE RIVERS, OREG. AND WASH.

(H. Doc. 203, 87th Cong.)

*Location.*—The Columbia River rises in British Columbia, enters the United States in northeastern Washington, flows southerly to its confluence with the Snake River, thence westerly along the Oregon-Washington boundary to the Pacific Ocean. The reach of the Columbia River under consideration in this report extends from the mouth of the Willamette River upstream 4.5 miles to Vancouver, Wash., 106 river miles from the sea.

*Authority.*—Resolutions by the Senate and House Public Works Committees adopted March 14, 1957, and April 9, 1957, respectively.

*Existing project.*—Provides for a channel 35 feet deep and 500 feet wide from the mouth of Columbia River to Portland, Oreg., a distance of 113 miles; and a channel 30 feet deep and 300 feet wide from the mouth of Willamette River to Vancouver, Wash., a distance of 5 miles, with two turning basins 30 feet deep and 800 feet wide, and approximately 2,000 and 3,000 feet long for the upper and lower basins, respectively. The project has been completed.

*Navigation problem.*—Inadequate channel depth and width for vessels now using the waterway between the mouth of Willamette River and Vancouver. Groundings and damage to ships have been prevented by light loading and, during low river stages, running the tides.

*Recommended plan of improvement.*—Provides for a channel in the Columbia River 35 feet deep and 500 feet wide from the mouth of the Willamette River to the interstate bridge at Vancouver, Wash., with two turning basins 35 feet deep, 800 feet wide, and 2,000 and 5,000 feet long for the upper and lower basins, respectively.

*Estimated cost (fourth quarter price level of 1959).—*

Federal.....	\$492, 500
Non-Federal .....	17, 900
Total.....	510, 400

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$17, 660	\$840	\$18, 500
Maintenance.....	48, 000	0	48, 000
Total.....	65, 660	840	66, 500
<b>Annual benefits:</b>			
Transportation savings.....			159, 770
Land enhancement.....			12, 000
Total.....			171, 770

*Benefit-cost ratio.*—2.6.

*Local cooperation.*—Contribute in cash 3.5 percent of the construction cost, presently estimated at \$17,900 in a lump sum prior to construction; provide all lands, easements, and rights-of-way including spoil disposal areas; provide and maintain depths in berthing areas and local access channels commensurate with project depths; hold

and save the United States free from damages; provide and maintain public terminal facilities open to all on equal terms. Local interests have indicated willingness to meet requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Washington: Favorable.

State of Oregon: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

COLUMBIA AND LOWER WILLAMETTE RIVERS BELOW VANCOUVER, WASH.,  
AND PORTLAND, OREG.

(H. Doc. 452, 87th Cong.)

*Location.*—The Columbia River rises in British Columbia, enters the United States in northeastern Washington, flows southerly to its confluence with the Snake River, thence westerly along the Oregon-Washington boundary to the Pacific Ocean.

*Authority.*—Resolutions by the Committee on Public Works of the U.S. Senate and House of Representatives adopted March 14, 1957, and April 9, 1957, respectively.

*Existing project.*—The existing project for the Columbia and lower Willamette Rivers provides for a channel 35 feet deep and 500 feet wide in the Columbia River from about river mile 3 to the mouth of Willamette River, mile 101.5, thence 30 feet deep and 300 feet wide to Vancouver, river mile 106.5; upper and lower turning basins at Vancouver: a channel in the Willamette River 35 feet deep from the mouth to Portland, a distance of about 11.6 miles; numerous side channels and connecting waterways; a small-boat mooring basin at Astoria; and construction of stone and pile dikes and revetments. Local interests have provided channel improvements and maintenance in addition to port facilities. Several power and navigation dams upstream from Vancouver have been built by the Federal Government. Others, either under construction or authorized, will provide slackwater navigation on the Columbia River to Pasco-Kennewick, Wash., river mile 329, and on the Snake River to Lewiston, Idaho, river mile 140.

*Navigation problem.*—With the present trend to use of larger ships, increased operating costs will be incurred through delays, light loading, and possible ship damage. The existing project dimensions restrict the use of larger ships and eventually will limit the commerce carried by the waterway.

*Recommended plan of improvement.*—(a) A channel 40 feet deep and 600 feet wide from Vancouver, Wash., river mile 105.5, to the mouth of Columbia River, river mile 3; (b) a turning basin at Vancouver, Wash., 40 feet deep, 800 feet wide, and about 5,000 feet long; (c) a turning basin at Longview, Wash., 40 feet deep, average width of 1,200 feet, and about 6,000 feet long; and (d) a channel 40 feet deep in Willamette River with varying widths of 600 to 1,900 feet, from the mouth, river mile 0, to Broadway Bridge, river mile 11.6 which encompasses the Portland Harbor area; with the provision that accomplishment of that portion of the plan contained in items (a) and (b) be contingent upon accomplishment of improvements in



these areas recommended in interim report on Columbia River dated March 31, 1961.

*Estimated cost (1961 price level).—*

Federal.....	\$20,100,000
Non-Federal.....	<sup>1</sup> 419,000
<b>Total.....</b>	<b>20,519,000</b>

<sup>1</sup> Cash contribution.

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$733,000	\$23,000	\$756,000
Maintenance and operation.....	775,000		775,000
<b>Total.....</b>	<b>1,508,000</b>	<b>23,000</b>	<b>1,531,000</b>
<b>Annual benefits:</b>			
Elimination of delays.....			2,322,000
Elimination of groundings.....			7,800
Delays in entrance.....			-99,400
Land enhancement.....			84,800
<b>Total.....</b>			<b>2,315,200</b>

*Benefit-cost ratio.—1.5*

*Local cooperation.*—Provide all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of aids to navigation; hold and save the United States free from damages; provide and maintain at local expense adequate public terminal and transfer facilities; accomplish such alterations as are required in utility facilities; assist in the work of improving and maintaining the main ship channel in Columbia and Willamette Rivers; provide and maintain depths in berthing areas and local access channels serving the terminals commensurate with the depths provided in the related project areas; and contribute in cash 1.8 percent of the cost of construction by the Corps of Engineers. Local interests have indicated willingness to provide required cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

State of Washington: Favorable.

State of Oregon: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

**TACOMA HARBOR, PORT INDUSTRIAL AND HYLEBOS WATERWAYS, WASH.**

(S. Doc. 104, 87th Cong.)

*Location.*—Tacoma Harbor is in west-central Washington at the head of Commencement Bay, a southeasterly arm of Puget Sound, and is about 26 nautical miles south of Seattle.

*Authority.*—Resolution of the Committee on Public Works of the U.S. Senate adopted May 27, 1955.

*Existing project.*—City, Port Industrial, and Hylebos Waterways, as well as two training walls at the mouth of Puyallup Waterway, are

the features of the existing Federal project for Tacoma Harbor. City Waterway has a depth of 29 feet in the outer portion and depths of 22 feet and 19 feet in the inner portion, and Port Industrial and Hylebos Waterways are 30 feet deep.

*Navigation problem.*—Development of lands, navigation channels, and related facilities are needed for the continued growth and development of water-oriented industry in the Tacoma Harbor area. There is an urgent need for waterfront industrial sites in the Puget Sound area.

*Recommended plan of improvement.*—Improvement of: Port Industrial Waterway by extending it about 3,900 feet at a width of 300 feet, and providing a turning basin beyond the inner end 1,200 feet wide, all at a depth of 35 feet below mean lower low water; reducing the width of the existing channel to 600 feet and deepening to 35 feet between Lincoln Avenue and East 11th Street; and reducing the width of the existing channel to 650 feet and deepening to 35 feet over a width of 300 feet from East 11th Street to the bay; and Hylebos Waterway by extending it about 2,000 feet at a width of 200 feet, and providing a turning basin beyond the inner end 770 feet wide; increasing the width of the existing channel to 200 feet; reducing the authorized width of the existing turning basin to 510 feet inclusive of the width of the existing channel; all at the existing project depth of 30 feet below mean lower low water.

*Estimated cost (1961 price level).*—

Federal.....	\$2, 460, 000
Non-Federal.....	<sup>1</sup> 2, 159, 000
Total.....	
4, 619, 000	

<sup>1</sup> Includes \$921,000 cash contribution.

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$91,000	\$133,000	\$224,000
Maintenance and operation.....	8,000	5,000	13,000
Total.....	99,000	138,000	237,000
<b>Annual benefits:</b>			
Transportation savings.....			164,400
Land enhancement.....			185,000
Total.....			349,400

*Benefit-cost ratio.*—1.5 (Port Industrial Waterway has a benefit-cost ratio of 1.3; Hylebos Waterway a ratio of 2.3.)

*Local cooperation.*—Provide all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project; hold and save the United States free from damages; provide and maintain adequate public terminal and transfer facilities; provide and maintain depths in berthing areas commensurate with the channel depths; accomplish alteration of utilities as required; restrict the sale of waterfront sites along channels to firms requiring water transportation; and contribute in cash or equivalent work 29.5 and 19.5 percent, respectively, of the first cost of construction for the Port Industrial and Hylebos Waterways improvements, presently esti-

mated at a total of \$921,000. Port of Tacoma officials have indicated a willingness to provide the necessary local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

State of Washington: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### KINGSTON HARBOR, WASH.

(H. Doc. 417, 87th Cong.)

*Location.*—On the west side of Puget Sound about 9 miles northwest of Seattle, Wash.

*Authority.*—House Public Works Committee resolution adopted March 30, 1955.

*Existing project.*—There is no Federal project for navigation at Kingston Harbor. In 1953 the Port Commission of Kingston completed a ferry terminal which involved dredging an adjacent area of about 4 acres to a depth of 10 feet to obtain fill material. This area, together with a locally constructed wharf and float, provides temporary accommodations for transient small craft.

*Navigation problem.*—Small craft are subject to damage from easterly storms and additional anchorage area for refuge is needed for recreational and fishing craft.

*Recommended plan of improvement.*—Construction of a breakwater, 1,040 feet long and dredging an entrance channel 12 feet deep and 80 to 120 feet wide from deep water around the southerly end of the breakwater to the locally dredged boat basin.

*Estimated cost (March 1961 price level).*—

Federal.....	\$428, 000
Non-Federal.....	<sup>1</sup> 195, 000
<b>Total.....</b>	<b>623, 000</b>

<sup>1</sup> Includes cash contribution of \$193,000.

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$16, 600	\$11, 500	\$28, 100
Maintenance.....	5, 000		5, 000
Navigation aids.....	300		300
<b>Total.....</b>	<b>21, 900</b>	<b>11, 500</b>	<b>33, 400</b>
<b>Annual benefits:</b>			
Recreational boating.....			26, 600
Commercial fishing.....			15, 800
<b>Total.....</b>			<b>42, 400</b>

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Contribute in cash 31 percent of construction cost of the breakwater and channel, such contribution presently estimated at \$193,000, in a lump sum prior to construction; provide all



lands, easements, and rights-of-way, including spoil disposal areas; hold and save the United States free from damages; provide and maintain adequate public landing facilities, open to all on equal terms; provide access roads and parking areas; make necessary utility relocations. Local interests have indicated willingness to furnish requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Washington: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### SWINOMISH CHANNEL, WASH.

*Location.*—Swinomish Channel (formerly Swinomish Slough) is a narrow tidal channel connecting Padilla Bay and Saratoga Passage, and separating Fidalgo Island from the mainland of northwestern Washington. It affords an inside passage between Puget Sound ports on the south and Bellingham and other ports on the north.

*Authority.*—Resolutions by the Committees on Public Works of the U.S. Senate and House of Representatives adopted May 18, 1957, and February 20, 1951, respectively.

*Existing project.*—The existing Federal project provides for a channel 100 feet wide and 12 feet deep from Saratoga Passage to Padilla Bay, a distance of 11 miles. Local interests have provided terminal facilities and berthing areas.

*Navigation problem.*—The existing channel is considered unsafe due to lack of 16 feet depth, crooked alinement, and reefs. Bank erosion is threatening dikes protecting valuable farmlands. A small boat harbor is needed for moorage for recreational and other craft and as a harbor of refuge.

*Recommended plan of improvement.*—Improve the passage through the "Hole-in-the-Wall" by removing to a depth of 12 feet the submerged points projecting from Fidalgo and McGlinn Islands, and removing part of McGlinn Island to an elevation of 12 feet above mean lower low water to improve sight distance.

*Estimated cost (1961 price level).*—

Federal.....	\$887, 000
Non-Federal.....	1, 000
<b>Total.....</b>	<b>888, 000</b>

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$32, 900	(1)	\$32, 900
Maintenance and operation.....			
<b>Total.....</b>	<b>32, 900</b>		<b>32, 990</b>
<b>Annual benefits:</b>			
Saving in operational cost of tugs.....			16, 100
Reduction in vessel and raft damage.....			7, 400
Reduction in waiting time.....			10, 700
Savings by increased traffic.....			9, 600
<b>Total.....</b>			<b>43, 800</b>

<sup>1</sup> Negligible.

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Provide all lands, easements and rights-of-way and suitable spoil areas. Local residents are formulating plans for organizing a port district. Informal assurances have been given that local interests will cooperate in the planned improvements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Washington: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### KAUNAKAKAI HARBOR, MOLOKAI, HAWAII

(H. Doc. 484, 87th Cong.)

*Location.*—On the south-central coast of the island of Molokai, about 60 miles from Honolulu Harbor on the island of Oahu.

*Authority.*—House Public Works Committee resolution adopted April 9, 1957.

*Existing project.*—Completed in 1934, provides an entrance channel 530 feet wide, and a basin 1,500 feet long, 600 feet wide and 23 feet deep at mean lower low water.

*Navigation problem.*—Molokai is the only large Hawaiian island without a deepwater harbor for transpacific shipping. Commerce consists principally of pineapples grown on the island and shipped by barge to Honolulu for processing. Savings could be effected by processing pineapples on Molokai for direct shipment by deep-draft vessels to the mainland. Also, additional harbor area is needed for commercial fishing and recreational boating.

*Recommended plan of improvement.*—Provides for: (a) a new entrance channel 500 feet wide and 40 feet deep; (b) a deepwater harbor of about 62 acres, 35 feet deep; (c) a harbor basin for light-draft vessels of about 10 acres, 15 feet deep; (d) a south breakwater 2,300 feet long; and (e) a west breakwater and stream jetty 4,000 feet long.

*Estimated cost (price level of May 1961).*—

Federal.....	\$7, 919, 000
Non-Federal.....	702, 000

Total.....	8, 621, 000
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#### *Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$290, 000	\$33, 000	\$323, 000
Maintenance and operation.....	24, 000	4, 000	28, 000
Total.....	314, 000	37, 000	351, 000
<b>Annual benefits:</b>			
Transportation savings.....			1, 453, 000
Land fill.....			19, 400
Damages prevented.....			28, 000
Recreational boating.....			24, 400
Commercial fishing.....			4, 400
Total.....			1, 529, 200

*Benefit-cost ratio.*—4.4.

*Local cooperation.*—Construction be contingent upon the prior or current establishment and operation on Molokai by local interests of industrial facilities related to trans-Pacific commerce, and local interests agree to: (a) contribute in cash 0.5 percent of the first cost of the general navigation facilities for the deepwater harbor, and 42.5 percent of the first cost of the general navigation facilities and for light-draft harbor, such contributions, presently estimated at \$202,000; (b) provide all lands, easements, and rights-of-way, including royalty-free borrow and quarry materials, and suitable areas for disposal of spoil and necessary retaining dikes, bulkheads, and embankments; (c) hold and save the United States free from damage which might result from construction and maintenance of the project; (d) accomplish all alterations of roads and utilities; (e) provide and maintain berthing areas, public terminal and transfer facilities for the deepwater basin, and adequate mooring facilities, and a public landing in the light-draft harbor open to all on equal terms; and (f) an adequate refrigeration and storage facility at the light-draft harbor in support of commercial fishing operations. Local interests have given informal assurances that the requirements of local cooperation will be met.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

State of Hawaii: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### STATE OF NEW HAMPSHIRE BEACH EROSION CONTROL

(H. Doc. 416, 87th Cong.)

*Location.*—Area includes about 18 miles of shore frontage comprising the entire Atlantic Ocean shore of the State of New Hampshire. It includes the towns of New Castle, Rye, North Hampton, Hampton, and Seabrook.

*Report authorized by.*—Section 2 of River and Harbor Act approved July 3, 1930 (cooperative study provisions).

*Existing project.*—A Federal project authorized September 3, 1954, (HD 325/83/2) provided for Federal participation in widening about 5,200 feet of beach at Hampton Beach. The work was completed in 1955 at a cost of \$374,234.59 and the State subsequently reimbursed \$124,744.86 as the Federal share thereof.

*Beach erosion control problem.*—Gradual erosion from storm wave attack and reduction in natural supply of beach material has reduced beach width fronting developed areas to such extent that these areas are exposed to wave damage during storms and beach areas are inadequate for recreational use. The existing beach restoration project at Hampton Beach includes periodic replenishment of beach fill as a project feature to be accomplished by local interests, and a groin is needed to maintain the project beach width along the northern portion of that beach. The passage of Public Law 826, 84th Congress, approved July 28, 1956, permits Federal participation in periodic nourishment of beaches. Review of the existing Hampton Beach project to determine need for modification, nourishment requirements, and eligibility for Federal participation toward their cost was also desired.



*Recommended plans of improvement.*—Provide for (a) at North Hampton Beach—widening 1,600 feet of beach to 150-foot width by direct placement of sand fill and construction of a 460-foot groin; (b) at Wallis Sands Beach—widening 800 feet of beach to 150-foot width by direct placement of sand fill and construction of a 350-foot groin; and (c) at Hampton Beach—modification of the existing project to authorize construction of a 235-foot groin and Federal contribution of one-third toward the costs of periodic nourishment of the beach for an initial period of 10 years from the year of the first nourishment operation.

*Estimated costs (June 1960 price level).*—

	Federal	Non-Federal	Total
North Hampton Beach.....	\$41,000	\$129,000	\$170,000
Wallis Sands Beach.....	41,000	82,000	123,000
Hampton Beach (new work—groin).....	6,000	12,000	18,000
Total.....	88,000	223,000	311,000

The estimated cost of periodic nourishment at Hampton Beach, a responsibility of local interests under the existing project, is \$50,000 annually. The recommended modification of the project provides for Federal participation in this cost as follows:

	Per year for 1st 10 years	Per year Thereafter
Federal.....	\$16,700	0
Non-Federal.....	33,300	\$50,000
Total.....	50,000	50,000

*Project economics.*—Overall project at Hampton Beach includes initial construction completed in 1955 at a total cost of \$374,235 and recommended new work.

**Annual charges:**

North Hampton Beach.....	\$12,700
Wallis Sands Beach.....	8,200
Hampton Beach (new work).....	1,100
Total (new work).....	22,000
Hampton Beach (overall).....	<sup>1</sup> 66,390

<sup>1</sup> Includes Federal share of periodic nourishment costs estimated at \$16,700 per year for 1st 10-year period.

**Annual benefits:**

North Hampton Beach.....	\$16,950
Wallis Sands Beach.....	18,000
Hampton Beach (new work).....	6,000
Total (new work).....	40,950
Hampton Beach (overall).....	140,190

**Benefit-cost ratio:**

North Hampton Beach.....	1.3
Wallis Sands Beach.....	2.2
Hampton Beach (new work).....	5.4
Hampton Beach (overall project).....	2.1

*Local cooperation.*—Obtain approval of the Chief of Engineers for plans and specifications and arrangements for prosecuting the work prior to its commencement; provide suitable appurtenant facilities at

North Hampton Beach to the extent necessary for realization of evaluated benefits; and furnish satisfactory assurances that local interests will maintain the protective measures and provide periodic nourishment during their economic life, but in the case of Hampton Beach, with Federal assistance as recommended; control water pollution to the extent necessary to safeguard the health of bathers; and maintain continued public ownership of the shores upon which the Federal participation is based, and their administration for public use.

*Comments of State and Federal agencies.*—

State of New Hampshire: Favorable.

Department of the Interior: Favorable.

*Comments of Bureau of Budget.*—No objection.

FIRE ISLAND INLET AND SHORE WESTERLY TO JONES INLET, N.Y., BEACH  
EROSION CONTROL

*Location.*—The study area is located on the south shore of Long Island, N.Y., and extends a distance of about 15 miles between Fire Island Inlet and Jones Inlet.

*Report authorized by.*—Section 2 of the River and Harbor Act approved July 3, 1930 (cooperative study provisions).

*Existing project.*—The existing Federal beach erosion project authorized July 3, 1958, provides for Federal participation in restoration and protection of the shore from Oak Beach at Fire Island Inlet to Jones Inlet consisting of three dredging operations over a project life of 15 years. The existing Federal navigation project authorized by the River and Harbor Act of 1950 provides a channel through Fire Island Inlet generally 10 feet deep and 250 feet wide, and a 5,000-foot jetty at the west end of Fire Island.

*Beach erosion control problem.*—Continuing erosion of the protective and recreational beach in the study area has progressed in recent years to such an extent that use of the beach is impaired and improvements in the shore-front areas are damaged by storms and subject to possible destruction. Presently authorized protective improvements are inadequate to provide the protection required under existing conditions. The westerly movement of littoral drift into the inlet results in shoaling and shifting of the channel and in the possibility of eventual closure of the inlet unless littoral drift is stopped or bypassed.

*Considered plans of improvement.*—Provide for Federal participation in the construction of a long-term solution of the erosion problem consisting generally of either an offshore breakwater or a jetty extension to trap littoral drift, placement of sand to restore the beach, provision of feeder beach areas to nourish downdrift shores, and periodic transfer of sand from lee of the breakwater or jetty to feeder beaches.

*Project cost and economics.*—At this time the Chief of Engineers is unable to determine definitely costs or economic justifications for the long-term plans. However, studies have advanced sufficiently to indicate that protective measures are warranted and that the anticipated benefits will probably exceed the cost.

*Status.*—The review report of the district engineer has not been completed and reviewed in accordance with established procedures.



A preliminary report was submitted by the district engineer, New York district on July 6, 1962, and forwarded by the division engineer on the same date to the Chief of Engineers.

*Remarks.*—The committee has noted that the erosion problem on the south shore of Long Island from Fire Island Inlet to Jones Inlet has been aggravated by the storms of March 1962. The erosion and silting of the inlets is a continuing problem and early solution and remedial measures are essential. It is also noted that unless littoral drift is stopped or bypassed, the inlet eventually may be closed.

#### VIRGINIA BEACH, VA., BEACH EROSION CONTROL

(H. Doc. No. 382, 87th Cong.)

*Location.*—On the Atlantic Ocean shore about 3.5 miles south of the entrance to Chesapeake Bay and 19 miles east of Norfolk.

*Report authorized by.*—Section 2 of River and Harbor Act approved July 3, 1930 (cooperative study provisions).

*Existing project.*—Authorized by River and Harbor Act of 1954 (H. Doc. No. 186, 83d Cong., 1st sess.), provided for initial widening of the beach to 100-foot width at elevation 7 feet above mean low water and deferred construction of a system of 21 groins to be built if experience demonstrates their need. Initial beach widening completed in 1953.

*Beach erosion control problem.*—Virginia Beach is the largest and most popular resort center in Virginia and is extensively developed for tourist trade. The existing project includes periodic replenishment of beach fill as a project feature to be accomplished by local interests. The passage of Public Law 826, 84th Congress, approved July 28, 1956, permits Federal participation in periodic nourishment of beaches. Review of the existing project to determine nourishment requirements and eligibility for Federal participation toward its cost was desired.

*Recommendation.*—Modification of the existing project to authorize Federal contribution of one-third of the costs of periodic nourishment of the shore for a period of 25 years from the date of commencement of operations in placing an initial quantity of nourishment material equal to the deficiency in the design beach at that time.

*Estimated costs (January 1961 price levels).*—The estimated costs of periodic nourishment, a responsibility of local interests under the existing project, are \$150,000 to provide initial quantity of nourishment to make up existing deficiency in design beach plus \$54,000 annually for normal nourishment. The recommended modification of the project provides for Federal participation in this cost as follows:

	Per year for 1st 3 years	Per year, next 22 years	Per year thereafter
Federal.....	\$34,700	\$18,000	
Non-Federal.....	69,300	36,000	\$54,000
Total.....	104,000	54,000	54,000



*Project economics.*—Overall project including initial construction completed 1953 at total cost of \$705,000.

	Exclusive of deferred groins	Including groins
Annual charges:		
Interest and amortization.....	\$31,000	\$79,700
Maintenance.....		22,900
Beach nourishment.....	<sup>1</sup> 57,000	37,000
Total.....	88,000	139,600
Annual benefits:		
Prevention of damages.....		216,000
Increased earning power of property.....		155,000
Recreational.....		28,000
Total.....		399,000

<sup>1</sup> Federal participation \$34,700 per year for 3 years, thence \$18,000 per year for 22 years.

*Benefit-cost ratio.*—4.5 (overall project without deferred groins): 2.9 (overall project including groins).

*Local cooperation.*—Continuation of conditions of local cooperation required for Federal participation in the existing project, but with Federal assistance in the costs of periodic beach nourishment as recommended.

*Comments of State and Federal agencies.*—

State of Virginia: Favorable.

Department of the Interior: Favorable.

*Comments of Bureau of the Budget.*—No objection.

#### FORT MACON, ATLANTIC BEACH, AND VICINITY, NORTH CAROLINA— BEACH EROSION CONTROL

(H. Doc. 555, 87th Cong.)

*Location.*—The study area comprises about 5 miles of shore fronting the Atlantic Ocean on the outer banks of North Carolina, immediately southwest of Beaufort Inlet, located approximately halfway between the Virginia and South Carolina boundaries.

*Report authorized by.*—Section 2 of River and Harbor Act approved July 3, 1930 (cooperative study provisions).

*Existing project.*—No existing Federal beach erosion control project.

*Beach erosion control problem.*—Erosion and recession of the shore has seriously reduced the width of beaches in the area; and private resort areas, public recreational facilities, and historic Fort Macon have been made seriously vulnerable to storm wave damages.

*Recommended plan of improvement.*—Restore approximately 1.5 miles of beach at Fort Macon State Park to a berm width of 100 feet by direct placement of sand fill; construct a stone groin about 1,670 feet in length, about 250 feet of stone revetment and about 530 feet of stone seawall; and provide Federal participation in subsequent periodic nourishment of the beach for a period of 10 years.

*Estimated costs (May 1961 price level).—*

Federal.....	\$194, 000
Non-Federal.....	389, 100
Total.....	583, 100

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$7, 300	\$18, 500	\$25, 800
Maintenance.....	0	1, 000	1, 000
Beach nourishment.....	<sup>1</sup> 2, 400	4, 800	7, 200
Total.....	9, 700	24, 300	34, 000
Annual benefits:			
Prevention of damages.....			5, 300
Prevention of land loss.....			30, 000
Recreation.....			54, 500
Total.....			89, 800

<sup>1</sup> For 1st 10-year period.*Benefit-cost ratio.—2.7.*

*Local cooperation.*—Obtain approval by the Chief of Engineers for plans and specifications and arrangements for prosecuting remaining work prior to its commencement; and furnish satisfactory assurances that local interests will maintain the protective measures and provide periodic beach nourishment during the economic life of the project, control water pollution to the extent necessary to safeguard the health of bathers, and maintain continued public ownership of the shore upon which Federal participation is based and their continued administration for public use.

*Comments of State and Federal agencies.—*

State of North Carolina: Favorable.

Department of the Interior: Favorable.

*Comments of Bureau of the Budget.*—No objection.

## VIRGINIA KEY AND KEY BISCAYNE, FLA., BEACH EROSION CONTROL

(H. Doc. 561, 87th Cong.)

*Location.*—In Dade County, Fla., comprising the Atlantic Ocean shores of Virginia Key and Key Biscayne, two of a chain of barrier islands, just south of the entrance to Miami Harbor.

*Report authorized by.*—Section 2 of the River and Harbor Act approved July 3, 1930 (cooperative study provisions).

*Existing project.*—No existing Federal beach erosion control project.

*Beach erosion control problem.*—Virginia and Biscayne Keys are primary recreation areas for metropolitan Dade County and the city of Miami. Instability and recession of the ocean-front shores have resulted in loss of public beach areas, both for those areas which are presently developed as parks and those for which development in the very near future will be required to provide for anticipated greatly increased recreational use.

*Recommended plan of improvement.*—Provides for periodic nourishment of 1.8 miles of public beach on Virginia Key and 1.9

miles on Key Biscayne at estimated rates of 80,000 and 65,000 cubic yards per year, respectively, and deferred construction of three groins on Virginia Key and one groin on Key Biscayne until such time as experience gained in nourishing the beaches should indicate the need for the groins.

*Estimated costs (spring 1961 price levels).—*

	Virginia Key	Key Biscayne	Total
Deferred groins:			
Federal.....	\$182,000	\$38,000	\$220,000
Non-Federal.....	365,000	77,000	442,000
Total.....	547,000	115,000	662,000
Periodic nourishment:			
Federal.....	<sup>1</sup> 25,300	<sup>1</sup> 22,700	
Non-Federal.....	<sup>2</sup> 50,700	<sup>2</sup> 45,300	
Total.....	76,000	68,000	

<sup>1</sup> Per year for 1st 10 years.

<sup>2</sup> Per year for 1st 10 years (full total thereafter).

*Project economics.—*

	Virginia Key	Key Biscayne
Annual charges:		
Deferred groins:		
Interest and amortization.....	\$20,100	\$4,100
Maintenance.....	4,700	1,000
Total (deferred).....	24,800	5,100
Beach nourishment (without groins).....	76,000	68,000
Annual benefits:		
Prevention of damages.....	1,600	1,600
Recreation.....	214,000	225,000
Total.....	215,600	226,600

*Benefit-cost ratio.*—Computed on the basis of nourishment only as the deferred groins will be constructed only if total annual charges for both groins and nourishment are less than annual charges for beach nourishment alone.

Virginia Key.....	2.8
Key Biscayne.....	3.8

*Local cooperation.*—Obtain approval by the Chief of Engineers for plans and specifications and arrangements for prosecuting the work prior to its commencement; and furnish satisfactory assurances that local interests will: control water pollution to the extent necessary to safeguard the health of bathers, and maintain continued public ownership of the shores upon which Federal participation is based and their administration for public use. In the event that groins are found to be needed and justified, furnish assurances that for these works they will meet the conditions of local cooperation specified above; maintain the groins; and provide such related periodic beach nourishment as may be necessary to meet project objectives, subject to the recommended Federal participation for the 10-year initial period.



*Comments of State and Federal agencies.—*

City of Miami: Favorable.

Dade County: Favorable.

State of Florida: Favorable.

Department of the Interior: Favorable.

*Comments of the Bureau of the Budget.—*No objection.LAKE ERIE SHORE LINE FROM THE MICHIGAN-OHIO STATE LINE TO  
MARBLEHEAD, OHIO BEACH EROSION CONTROL

(H. Doc. 63, 87th Cong.)

*Location.—*Area comprises the westernmost 35 miles of the south shore of Lake Erie and the Maume Bay shore adjacent to the city of Toledo.*Report authorized by.—*Section 2 of River and Harbor Act approved July 3, 1930 (cooperative study provisions).*Existing project.—*No existing beach erosion control project.*Beach erosion control problem.—*Shores are principally low lying marshy or reclaimed marsh areas fronted by low barrier beaches of fine sand. The barrier beaches have a continuous history of erosion and in a number of places have been breached or so deteriorated that the marshes are directly exposed to waves from Lake Erie and recreational park area has been seriously reduced.*Recommended plan of improvements.—*Restore and protect the shore at Crane Creek State Park by restoring 17,800 feet of sand barrier beach to a 50-foot width at elevation 9 feet above low water datum by placement of suitable sand fill, constructing 36 groins spaced generally at 500-foot intervals and extending lakeward about 300 feet (construction of 26 of the groins to be deferred pending determination of the need thereof), and providing Federal participation in periodic nourishment of the beach for the period during which groins are deferred.*Estimated costs (price level of November 1959).—*

Federal .....	\$658, 500
Non-Federal .....	1, 317, 200
Total .....	1, 975, 000

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$23, 800	\$46, 500	<sup>1</sup> \$70, 300
Maintenance (groins).....	0	6, 000	<sup>1</sup> 6, 000
Periodic nourishment.....	<sup>2</sup> 40, 000	80, 000	<sup>3</sup> 120, 000
Total.....	63, 800	132, 500	196, 300
<b>Annual benefits:</b>			
Recreational.....			257, 250
Land loss prevention.....			500
Total.....			257, 750

<sup>1</sup> Includes charges for all 36 groins.<sup>2</sup> For period during which construction of 26 groins is deferred.<sup>3</sup> Includes nourishment required with 26 groins deferred.

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Obtain approval by the Chief of Engineers of plans and specifications and arrangements for prosecuting the work prior to its commencement; provide parking and service facilities necessary to realize expected recreational benefits; furnish satisfactory assurances that local interests will: maintain the protective measures during their economic life including periodic nourishment, control water pollution to the extent necessary to safeguard bathers, and maintain continued public ownership of the shore and its administration for public use during the economic life of the project (50 years).

*Comments of State and Federal agencies.*—

State of Ohio: Favorable.

Department of Interior: Favorable.

*Comments of Bureau of the Budget.*—No objection.

SHEFFIELD LAKE COMMUNITY PARK, SHEFFIELD LAKE VILLAGE, OHIO,  
BEACH EROSION CONTROL

(H. Doc. 414, 87th Cong.)

*Location.*—On the south shore of Lake Erie about 20 miles west of Cleveland, Ohio.

*Report authorized by.*—Section 2 of River and Harbor Act approved July 3, 1930 (cooperative study provisions).

*Existing project.*—No existing Federal beach erosion control project.

*Beach erosion control problem.*—Erosion of the protective beach and bluffs precludes full development and recreational use of a publicly owned community park. Restoration of the beach and stabilization of the shore is necessary to provide adequate recreational beach area and protect park facilities.

*Recommended plan of improvement.*—Provides for restoration of a protective beach with minimum berm width of 40 feet at elevation 8 feet above low water datum along the 800 feet of park frontage and construction of 2 groins.

*Estimated costs (July 1960 price levels).*—

Federal.....	\$100,300
Non-Federal.....	200,700
Total.....	301,000

*Project economics.*—

Annual charges:

Interest and amortization.....	\$13,400
Maintenance (groins).....	1,000
Beach nourishment.....	6,400

Total.....	20,800
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Annual benefits:

Elimination of protective costs by present methods.....	1,300
Recreation.....	26,000

Total.....	27,300
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*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Obtain approval by the Chief of Engineers for plans and specifications and arrangements for prosecuting the work prior to its commencement; and furnish satisfactory assurances that local interests will: maintain the protective measures during their economic life, control water pollution to the extent necessary to safeguard the health of bathers, maintain continued public ownership of the shore and its administration for general public use, and relocate the storm sewer outfall at their own expense.

*Comments of State and Federal agencies.*—

State of Ohio: Favorable.

Department of the Interior: Favorable.

*Comments of Bureau of the Budget.*—No objection.

STATE OF CALIFORNIA, APPENDIX VII, SPECIAL INTERIM REPORT ON VENTURA AREA—BEACH EROSION CONTROL

(H. Doc. 458, 87th Cong.)

*Location.*—The study area located in Ventura County, comprises about 4 miles of shore on the Pacific Ocean, lying between the Ventura and Santa Clara Rivers, about 55 miles northwest of Los Angeles.

*Report authorized by.*—Section 2 of the River and Harbor Act approved July 3, 1930 cooperative study provisions).

*Existing project.*—A Federal project authorized September 3, 1954 (HD 29/83/1) provided for Federal participation in construction of three groins to protect about 1 mile of shore in the northwestern portion of San Buena Ventura State Park. Within his discretionary authority the Chief of Engineers, U.S. Army, in August 1961 approved modification of the existing project to shift the locations of the three authorized groins to the downdrift (southeastern) portion of the State park frontage where the problem has become more acute. These groins are planned for construction by the State of California in 1962.

*Beach erosion control problem.*—Continuing erosion of the protective and recreational beach at San Buena Ventura State Park has progressed in recent years to such extent that use of the park is impaired and public and private improvements in the Pierpoint residential community landward of the park are threatened with destruction. Presently authorized protective structures are inadequate to provide the protection required under existing conditions.

*Recommended plan of improvement.*—In lieu of the existing project, provides for Federal participation in the construction of nine groins and artificial placement of beach fill among approximately 2 miles of shore.



*Estimated costs (1961 price level).—*

Federal.....	\$515, 000
Non-Federal.....	1, 030, 000
Total.....	1, 545, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$18, 720	\$48, 090	\$66, 810
Maintenance:			
Groins.....	0	6, 000	6, 000
Sand fill.....	0	10, 000	10, 000
Total.....	18, 720	64, 090	82, 810
Annual benefits:			
Prevention of loss:			
Private lands and improvements.....			76, 450
Public lands and improvements.....			48, 880
Recreation.....			60, 000
Total.....			185, 330

*Benefit-cost ratio.—2.2.*

*Local cooperation.*—Obtain approval by the Chief of Engineers for plans and specifications and arrangements for prosecuting the work prior to its commencement; and furnish satisfactory assurances that local interests will maintain the protective measures during their economic life, control water pollution to the extent necessary to safeguard the health of bathers, and maintain continued public ownership of the shores upon which Federal aid is based and their administration for public use.

*Comments of State and Federal agencies.—*

State of California: Favorable.

Department of the Interior: Favorable.

*Comments of the Bureau of the Budget.*—No objection.  
(Sec. 102, see p. 231.)

## SECTION 103

Old lock and dam No. 7, Ohio River, near the city of Midland, Pa., was made obsolete by the construction of the New Cumberland lock and dam. Some 17.94 acres located at old lock and dam No. 7 have value for public park and recreation purposes. The land and the dam tenders' residences thereon are excess to the needs of the Ohio River navigation project.

The city of Midland, Pa., desires to obtain the subject lands for public park and recreation purposes and there is no objection to such use, provided that any grant to the city of Midland should be subject to such flowage rights as may be necessary in the operation of the New Cumberland lock and dam and that the deed contain a reversionary clause in the event the lands are not utilized for the purpose for which the grant is made.

The committee considers that this conveyance to the city of Midland is in the public interest.

## SECTION 104

This section is similar to that in previous River and Harbor Acts. It provides for reimbursement of local interests for work done by them on beach erosion control measures authorized in this bill subsequent to initiation of the studies which form the basis for these measures. Certain restrictions and limitations are included to safeguard the interests of the United States. This section provides a reasonable basis for proceeding with necessary beach erosion control measures at time of need, so that costly beach restriction or irrevocable loss of beaches may be avoided. The provision has been considered equitable in previous legislation, and the committee considers that it also should apply to beach erosion control measures included in this bill. (Sec. 105, see p. 232.)

## SECTION 106

This section is similar to that in previous River and Harbor Acts providing for authorization of needed surveys at specifically named localities.

## SECTION 107

This section identifies title I of the bill as the River and Harbor Act of 1962.

## ANALYSIS OF TITLE II

## SECTION 201

This section is the same as that which has been included in the last several flood control acts. It continues the provisions of local cooperation which have been in effect for some time, and provides that project authorization shall expire if local cooperation is not forthcoming within 5 years after appropriate notification.

## SECTION 202

This section is the same as that which has been included in the last several flood control acts. It continues the present procedure of submitting reports to the interested States and agencies prior to submission to Congress.

## SECTION 203

This section summarizes the project authorizations for flood control, hurricane protection, and multiple-purpose works in title II. The initial table lists the projects, project document numbers, and estimated Federal costs. Pertinent information follows for each project.

## TITLE II

*Flood control projects*

Projects	Document No.	Federal cost of new works
Alameda Creek, Calif.-----	S. 128, 87th Cong.-----	\$14,680,000
Alamogordo, N. Mex.-----	H. 473, 87th Cong.-----	2,040,000
Allegheny River at Salamanca, N. Y.-----	H. 166, 87th Cong.-----	1,390,000
Arkansas-Red River Basin, Okla.-----	S. 105, 87th Cong.-----	300,000
Arkansas River, Dodge River, Kans.-----	H. 493, 87th Cong.-----	2,133,000
Asotin Dam, Snake River, Idaho and Wash.-----	H. 403, 87th Cong.-----	99,818,000
Blackfoot Dam, Idaho-----	H. 568, 87th Cong.-----	829,000



*Flood control projects—Continued*

Projects	Document No.	Federal cost of new works
Bradley Lake power project, Cook Inlet, Alaska	H. 455, 87th Cong	\$45,750,000
Broken Bow Reservoir, Okla	S. —, 87th Cong	23,800,000
Buchanan Reservoir, Calif	S. 98, 87th Cong	13,585,000
Buckhannon River, W. Va	S. 43, 87th Cong	1,206,000
Burns Creek, Idaho	H. —, 87th Cong	52,000,000
Carolina Beach, N.C	H. 418, 87th Cong	739,000
Chattahoochee River at West Point, Ga	H. 570, 87th Cong	52,900,000
China Gardens Dam, Idaho, Oreg., and Wash	H. 403, 87th Cong	74,777,000
Chunky Creek, Chickasaw and Pascagoula Rivers, Miss	H. 549, 87th Cong	6,740,000
Clear Fork of the Brazos River at Abilene, Tex	H. 506, 87th Cong	31,200,000
Columbia Drainage and Levee District No. 3, Illinois	H. 543, 87th Cong	986,000
Corte Madera Creek, Marin County, Calif	H. 545, 87th Cong	5,534,000
Cow Creek, Kans	H. 531, 87th Cong	1,560,000
Crab Creek, Ohio	H. 440, 87th Cong	2,268,000
Cutler drain area, Florida	S. 123, 87th Cong	2,063,000
Dade County, central and southern Florida	S. 138, 87th Cong	13,388,000
Delaware River, Pa., N.J., Del., and Md	H. 522, 87th Cong	224,000,000
East Fork of Trinity River, Tex	H. 554, 87th Cong	23,760,000
Four River Basins, Fla	H. —, 87th Cong	57,760,000
Freeport and vicinity, Texas	H. 495, 87th Cong	3,780,000
French Creek, Pa	S. 95, 87th Cong	23,102,000
Guyandot River, W. Va	H. 569, 87th Cong	60,477,000
Harrisonville and Ivy Landing, Ill	H. 542, 87th Cong	1,112,000
Hidden Reservoir, Calif	S. 37, 87th Cong	14,338,000
Hugo Reservoir, Kiamichi River, Okla	S. —, 87th Cong	29,748,000
Illinois River and tributaries	H. 472, 87th Cong	71,465,000
Indian Creek, Iowa	H. 438, 87th Cong	1,270,000
Juniata River, Pa	H. 565, 87th Cong	32,150,000
Kansas River Basin	S. 122, 87th Cong	88,070,000
Kaw Reservoir, Okla	S. 143, 87th Cong	83,230,000
Kaysinger Bluff Reservoir, Mo	H. —, 87th Cong	43,245,000
Kentucky River, Ky	H. 423, 87th Cong	26,020,000
Kickapoo River, Wis	H. —, 87th Cong	15,570,000
Kokosing River, Ohio	H. 220, 87th Cong	2,438,000
Lake Kemp, Wichita River, Tex	S. 144, 87th Cong	6,410,000
Mad River, Ohio	H. 439, 87th Cong	7,930,000
Mississippi River Delta at and below New Orleans, La	H. 550, 87th Cong	7,502,000
Mississippi River, Guttentberg, Iowa	H. 286, 87th Cong	729,000
Mississippi River—Ste. Genevieve—St. Marys, Mo	H. 519, 87th Cong	2,500,000
Mississippi River upper urban areas from Hampton, Ill., to Cassville, Wis	H. 450, 87th Cong	5,350,000
Mystic, Groton, and Stonington, Conn	H. 411, 87th Cong	1,490,000
Narragansett pier, Rhode Island	H. 195, 87th Cong	1,152,000
Natchitoches and Red River Parishes, La	H. 476, 87th Cong	1,293,000
Naugatuck, Ansonia—Derby, Conn	H. 437, 87th Cong	5,620,000
New London, Conn	H. 478, 87th Cong	2,401,000
New Melones Reservoir, Calif	H. 453, 87th Cong	113,717,000
Norfolk, Va	H. 354, 87th Cong	1,537,000
Papillion Creek, Nebr	H. 475, 87th Cong	2,122,000
Pecatonica River, Ill. and Wis	H. 539, 87th Cong	850,000
Point Judith, R.I	H. 521, 87th Cong	2,414,000
Port Arthur and vicinity, Texas	H. 505, 87th Cong	23,380,000
Potomac River, North Branch, Md	H. 469, 87th Cong	50,965,000
Prairie Dupont Levee and Sanitary District, Ill	H. 540, 87th Cong	921,000
Raritan Bay and Sandy Hook Bay, N.J	H. 464, 87th Cong	3,097,000
Redwood Creek, Calif	H. 497, 87th Cong	2,580,000
Rend Lake Reservoir, Ill	H. 541, 87th Cong	35,500,000
Richland Creek, Ill	H. 571, 87th Cong	4,995,000
Rio Grande at Las Cruces, N.Mex	S. 117, 87th Cong	3,350,000
Ririe Dam and Reservoir, Idaho	H. 562, 87th Cong	7,027,000
River Rouge, Mich	H. 148, 87th Cong	8,659,000
Rogue River, Oreg	H. 566, 87th Cong	\$106,700,000
Rondout Creek and Wallkill River, N.Y. and N.J	S. 113, 87th Cong	5,111,000
Russellville, Ark		1,400,000
Russian River, Calif	H. 547, 87th Cong	42,400,000
Salt River, Mo	H. 507, 87th Cong	63,300,000
Sandusky River, Ohio	S. 136, 87th Cong	4,300,000
San Gabriel River, Tex	H. —, 87th Cong	20,250,000
Scioto River, Ohio	H. —, 87th Cong	55,847,000
Trinity River, Fort Worth, Tex.—Pt. II	H. 454, 87th Cong	5,148,000
Truckee River, Calif. and Nev	H. 435, 87th Cong	2,385,000
Twelvepole Creek, W. Va	H. 520, 87th Cong	11,000,000
Verdigris River, Okla	H. 563, 87th Cong	62,400,000
Village Creek, White River, Mayberry	H. 577, 87th Cong	1,018,000
Vince and Little Vince Bayous, Tex	H. 441, 87th Cong	2,224,000
Wareham and Marion, Mass	H. 548, 87th Cong	3,811,500
Warroad River and Bull Dog Creek, Minn	H. 449, 87th Cong	972,000
Westport, Conn	H. 412, 87th Cong	217,000
White River, Village Creek, Ark	H. 352, 87th Cong	1,968,000
Yazoo River, Gin Bayou, Miss		150,000
Total		1,895,313,500



## WAREHAM-MARION, MASS.

(H. Doc. 548, 87th Cong.)

*Location.*—The towns of Wareham and Marion, Mass., are located in Plymouth County about 45 miles south of Boston and 35 miles east of Providence, R.I. They are situated at the upper end of Buzzards Bay, 20 to 25 miles northeast of the entrance to the bay from the Atlantic Ocean.

*Authority.*—Public Law 71, 84th Congress, 1st session, approved June 15, 1955.

*Existing project.*—There are no existing or authorized Federal hurricane protection projects or local flood protection works in the area. Federal navigation projects provide a 15-foot-deep channel from Cape Cod Canal into Onset Bay, and a partially completed 9-foot channel from Buzzards Bay into Wareham.

*Problem.*—A serious problem of hurricane tidal flooding exists in the towns of Wareham and Marion. The acuteness of the problem is indicated by the fact that three severe hurricanes have struck the two towns within the past 23 years and upon their recurrence would cause total flood damages of over \$25 million to shore properties. In addition, a recurrence of these hurricanes would cause considerable storm damage to pleasure boat fleets presently based in the area.

*Recommended plan of improvement.*—Construction of a system of rock-protected, earth-fill barriers and supplemental dikes and walls consisting of a barrier 1,050 feet long across the Weweantic River about 1,300 feet above its mouth, including a 55-foot ungated navigation opening with a sill elevation at 11.0 feet below mean sea level, a dike extension on the west 900 feet long to high ground in Marion, a dike extension on the east about 1,300 feet long across Cromeset Neck to Nobska Point, and a dike about 4,800 feet long along an existing powerline north of U.S. Highway No. 6 in the town of Marion to prevent flanking of the Weweantic barrier; a barrier about 4,150 feet long across the Wareham River from Nobska Point, including a 100-foot ungated navigation opening with a sill elevation at 15 feet below mean sea level, and a dike extension from the east end of the barrier in the vicinity of Long Beach about 1,300 feet to high ground; a barrier about 2,800 feet long across Onset Bay between Burgess Point and Sias Point, including a partially gated 100-foot navigation opening with a sill elevation at 17.0 feet below mean sea level, a dike extension about 1,000 feet long to the west to high ground at Burgess Point, a dike extension about 1,800 feet long eastward to high ground at Sias Point, and a dike about 900 feet long on the south side of Great Neck Road 1.5 miles west of Burgess Point; and a wall 120 feet long and dikes totaling 3,250 feet for protection of the main business center of Wareham.

*Estimated cost (price level of 1961).—*

Federal.....	\$3, 811, 500
Non-Federal.....	1, 633, 500
Total.....	5, 445, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$113, 000	\$61, 000	\$174, 000
Maintenance and operation.....		13, 000	13, 000
Maintenance of navigation aids.....	1, 000		1, 000
Major replacements.....		2, 000	2, 000
Estimated tax losses.....		2, 000	2, 000
Total.....	114, 000	78, 000	192, 000
Annual benefits:			
Prevention of tidal-flood damages.....			458, 000
Elimination of emergency costs.....			9, 000
Prevention of damage to boats.....			290, 000
Total.....			757, 000

*Benefit-cost ratio.—3.9.*

*Local cooperation.*—Provide all lands, easements, and rights-of-way, including borrow areas and spoil disposal areas necessary for the construction of the project, at costs presently estimated at \$100,000; accomplish all changes, alterations, and additions to, or relocations of, any buildings and utilities made necessary by the construction of the project, at costs presently estimated at \$15,000; bear 30 percent of the total first cost of construction, a sum presently estimated at \$1,633,500, to consist of the items listed above and a cash contribution presently estimated at \$1,518,500, to be paid either in a lump sum prior to initiation of construction or in installments prior to start of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, the final apportionment of costs to be made after actual costs and values have been determined; hold and save the United States free from damages due to the construction works; maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; and at least annually notify those affected that the project will not provide complete protection from tidal flooding and that further local actions must be taken during hurricane emergencies. Local interests are willing to furnish the items of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Commerce: Favorable.

Commonwealth of Massachusetts: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## POINT JUDITH, R.I.

(H. Doc. 521, 87th Cong.)

*Location.*—Point Judith is located on the Atlantic shore of Rhode Island about 40 miles south of Providence, R.I.

*Authority.*—Public Works Committee of the U.S. Senate resolution adopted July 1, 1949.

*Existing project.*—There are no Federal improvements for hurricane tidal protection in the area. The existing Federal navigation improvement provides for a 770-acre harbor of refuge, an entrance channel and east and west channels, all 15 feet deep, a 5-acre anchorage 10 feet deep, and a channel and 5-acre anchorage basin 6 feet deep. There are also beach erosion control works at Sand Hill Cove State Beach and East Matunuck State Beach.

*Problems.*—Local interests desire improvement of the existing navigation improvement, dredged spoil to be used to build up the beaches, and protection from hurricanes by dikes, floodwalls, dune restoration, or combination thereof.

*Recommended plan of improvement.*—Construction of hurricane tidal protection between Matunuck and Point Judith, consisting of rock-faced dikes, revetment, dunes, bulkheads, high beach berms, and abutments and rock dikes at the Breachway; modification of the navigation project to include: (1) Straightening and deepening entrance channel to 20 feet; (2) enlarging 10-foot deep anchorage to 16 acres; (3) dredging a channel 150 feet wide and 10 feet along the State finger piers at Galilee to an 8-acre anchorage, 8 feet deep; (4) dredging a channel and 5-acre anchorage south of Snug Harbor; (5) deepening the Wakefield channel to 8 feet; and (6) dredging an additional 7-acre anchorage at Wakefield; and in lieu of the presently authorized beach erosion project at East Matunuck State Beach, widen 3,830 feet of beach generally to 150-foot width by direct placement of suitable sand fill, construction of groins, and installation of sand fences.

*Estimated cost (1961 price level).*—

Federal.....	\$2, 414, 000
Non-Federal.....	1, 151, 000
Total.....	3, 565, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$89, 100	\$49, 100	\$138, 200
Maintenance, operation and replacement.....	14, 200	66, 400	80, 600
Maintenance of navigation aids.....	600		600
Total.....	103, 900	115, 500	219, 400
Annual benefits:			
Hurricane protection.....			231, 800
Navigation.....			73, 300
Beach erosion protection.....			218, 700
Total.....			523, 800



*Benefit-cost ratio.*—2.4.

*Local cooperation.*—Provide without cost to the United States all lands, easements, rights-of-way, and spoil disposal, pondage, and borrow areas necessary for construction of the project and for subsequent maintenance of the navigation features, when and as required; accomplish without cost to the United States all alterations and relocations of sewerage and drainage facilities, buildings, utilities, highways, and other structures made necessary by the construction; bear 32 percent of the total first cost, a sum presently estimated at \$1,151,000, to consist of the items listed above and a cash contribution now estimated at \$701,000 to be paid either in a lump sum prior to initiation of construction or in installments prior to commencement of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, the final apportionment of cost to be made after actual costs and values have been determined; hold and save the United States free from damages due to construction of the project and subsequent maintenance of the navigation features; maintain and operate all the works after completion, except the navigation channels, anchorage area, and aids to navigation, in accordance with regulations prescribed by the Secretary of the Army; assure continued public ownership of the shore upon which Federal participation in beach erosion control is based and its administration for public use during the economic life of the project; control water pollution to the extent necessary to safeguard the health of bathers; provide and maintain without cost to the United States necessary mooring facilities and utilities, including additional public landings at Snug Harbor and Wakefield, with suitable supply facilities open to all on equal terms; construct and maintain and bulkheads required for retention of dredged material discharged to spoil disposal areas from the initial construction and subsequent maintenance of navigation features; provide suitable facilities at East Matunuck State Beach to support the recreational development of the beach; and at least annually inform the public and those affected that the improvement will not provide any substantial protection from ocean surges higher in elevation than that which occurred in September 1938. Local interests have indicated willingness to furnish local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

State of Rhode Island: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## NARRAGANSETT PIER, RHODE ISLAND

(H. Doc. No. 195, 87th Cong., 1st sess.)

*Location.*—On the Atlantic coast near the mouth of the west passage into Narragansett Bay, about 30 miles south of Providence, R.I.

*Authority.*—Public Law 71, 84th Congress, 1st session, approved June 15, 1955.

*Existing project.*—No Federal hurricane, flood control, or navigation projects are in the area. An authorized beach erosion project provides for widening about 1 mile of beach, construction of seven rock groins, and construction of a sand barrier on Little Neck Point.

*Problems.*—Hurricanes have caused severe tidal flooding; erosion of the beach is reducing the usable area; and there is a need for an improved small boat harbor.

*Recommended plan of improvement.*—Provides for improvements in the interest of hurricane flood protection, beach erosion control, and navigation consisting of: a sand berm of about 3,000 feet long; concrete walls about 4,500 feet long and 270 feet long; four groins; a rock revetment; a land dike about 1,120 feet long with a culvert and sluice gate on Little Neck Pond; a sand barrier; a mooring basin in Narrows River of 15 acres 8 feet deep with an entrance channel 8 feet deep and 100 feet wide; and a rock jetty about 930 feet long.

*Estimated cost (1959 price level).*—

Federal.....	\$1, 152, 000
Non-Federal.....	704, 000
Total.....	1, 856, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$42, 700	\$30, 600	\$73, 300
Maintenance and operation.....	4, 700	14, 100	18, 800
Total.....	47, 400	44, 700	92, 100
Annual benefits:			
Flood damages prevented.....			62, 500
Small boat harbor.....			39, 400
Beach protection.....			22, 000
Total.....			123, 900

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Provide all lands, easements, and rights-of-way; accomplish all alterations; bear 38 percent of the total first cost presently estimated to be \$704,000 which includes a cash contribution of \$564,000; hold and save the United States free from damages due to construction and maintenance; maintain and operate all work except the navigation project; assure public use of the beach improvement; prevent water pollution; prevent encroachment; provide and maintain suitable public landings; and construct and maintain retention walls for dredged material. Local interests have indicated willingness to cooperate in the desired improvements.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of Rhode Island: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

## NEW LONDON, CONN.

(H. Doc. 478, 87th Cong.)

*Location.*—On the west side of the Thames River estuary and the northeast shore of Long Island Sound, about 50 miles east of New Haven, Conn.

*Authority.*—Public Law 71, 84th Congress, 1st session.

*Existing project.*—There are no existing or authorized hurricane protection projects in the area. A low, rockfill, offshore barrier constructed by local interests south of Bentleys Creek provides a limited degree of wave protection for an industrial area. Completed Federal navigation projects provide a 33-foot deep channel extending 3.8 miles from Long Island Sound to State pier, a 23-foot deep channel about 6,000 feet long skirting the New London waterfront, and a depth of 15 feet in Shaw Cove.

*Flood problem.*—New London has experienced heavy tidal-flood losses from past hurricanes and other great storms. Recurrence of hurricanes of the magnitude of the 1938, 1944, and 1954 storms would cause losses ranging from \$250,000 for the 1944 hurricane to \$5,500,000 for the 1938 hurricane.

*Recommended plan of improvement.*—Consists of a section of barrier and walls extending about 3,260 feet from the vicinity of the ferry deck on Pequot Avenue, across Powder Island to Fort Trumbull, with a 30-foot gated navigation opening for the Bentleys Creek channel; a concrete land wall at Smith Street west of Fort Trumbull; and a 1,760-foot barrier and wall system across the mouth of Shaw Cove with a 46-foot gated navigation opening and a pumping station to dispose of interior drainage.

*Estimated cost (price level of 1961).—*

Federal.....	\$2, 401, 000
Non-Federal.....	1, 029, 000
Total.....	3, 430, 000

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$91, 000	\$45, 000	\$136, 000
Maintenance, operation and replacement.....	1, 000	26, 000	27, 000
Loss of land productivity.....		3, 000	3, 000
Total.....	92, 000	74, 000	166, 000
<b>Annual benefits:</b>			
Damages prevented.....			244, 400
Increased land use.....			5, 900
Total.....			250, 300



*Benefit-cost ratio.*—1.5.

*Local cooperation.*—(a) Provide without cost to the United States all lands, easements, and rights-of-way including borrow areas and spoil disposal areas necessary for the construction of the project, at costs presently estimated at \$180,000; (b) accomplish without cost to the United States all modifications or relocations of existing sewerage and drainage facilities, buildings, utilities, and highways made necessary by the construction of the project, at costs presently estimated at \$30,000; (c) bear 30 percent of the total first cost of construction, a sum presently estimated at \$1,029,000 to consist of items listed in subparagraphs (a) and (b) above and cash a contribution, now estimated at \$619,000, to be paid either in a lump sum prior to initiation of construction, or in installments prior to commencement of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, the final apportionment of cost to be made after actual costs and values have been determined; (d) hold and save the United States free from damages due to the construction works; and (e) maintain and operate all works after completion in accordance with regulations prescribed by the Secretary of the Army. Local interests have indicated their willingness to furnish the items of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of Connecticut: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### WESTPORT, CONN.

(H. Doc. 412, 87th Cong.)

*Location.*—On the north shore of Long Island Sound about 40 miles northeast of New York City.

*Authority.*—In partial response to Public Law 71, 84th Congress, 1st session, approved June 15, 1955.

*Existing project.*—There are no existing hurricane flood protection projects in the area.

*Flood problem.*—Three severe hurricanes and several other great storms have struck the area within the past 22 years.

*Recommended plan of improvement.*—Provides for construction of an earthen dike with rock paving on its top and seaward slope, where necessary, together with necessary gated culverts for interior drainage, starting at high ground north of the intersection of Compo Road South and Compo Beach Road and extending southerly along Grays Creek about 2,250 feet to the vicinity of Agawam Avenue; thence eastward along the seaward side of Compo Beach Road 1,460 feet to Soundview Drive; and thence northeasterly along the seaward side of Soundview Drive about 1,510 feet to high ground at Hills Point Road.

*Estimated cost (1960 price level).—*

Federal.....	\$217, 000
Non-Federal.....	93, 000
Total.....	310, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$8, 300	\$4, 900	\$13, 200
Maintenance and operation.....		3, 000	3, 000
Total.....	8, 300	7, 900	16, 200
Annual benefits: Damages prevented.....			39, 300

*Benefit-cost ratio.—2.4.*

*Local cooperation.*—(a) Provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project, at costs presently estimated at \$50,000; (b) accomplish without cost to the United States all relocations and alterations of buildings and utilities made necessary by the work, at costs presently estimated at \$3,000; (c) bear 30 percent of the total first cost of the project, a sum presently estimated at \$93,000, to consist of the items listed in subparagraphs (a) and (b) above and a cash contribution now estimated at \$40,000, to be paid either in a lump sum prior to initiation of construction, or in installments prior to commencement of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, the final apportionment of cost to be made after actual costs and values have been determined; (d) hold and save the United States free from damages due to the construction works; (e) maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; and (f) at least annually notify those affected that the project will not provide protection from surges in Long Island Sound higher in elevation than that experienced during the 1938 hurricane. They have indicated willingness to meet the items of local cooperation.

*Comments of the State and Federal Agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

State of Connecticut: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## MYSTIC, CONN.

(H. Doc. 411, 87th Cong.)

*Location.*—Mystic is located in southeastern Connecticut, on both banks of the lower Mystic River which empties into Long Island Sound.

*Authority.*—Public Law 71, 84th Congress, approved June 15, 1955.

*Existing project.*—There is no existing Federal project for hurricane protection at Mystic. The existing Federal navigation project provides for a channel 12 to 15 feet deep, extending 3.75 miles upstream from the mouth, and an anchorage and turning basin 9 feet deep. Local interests have constructed wharves, docks, and repair and service facilities.

*Flood problem.*—Three severe hurricanes have struck Mystic since the beginning of 1938 causing damages of serious proportion. At 1960 price levels total flood damages of about \$6 million would result from a recurrence of these three hurricanes and two other severe storms which occurred during this period.

*Recommended plan of improvement.*—Provide for two earth fill barriers protected by armor stone and riprap with crests 16.5 feet above mean sea level, one about 3,200 feet long across the harbor in the vicinity of Sixpenny Island with a 75-foot navigation opening, and one about 1,950 feet long across the inlet east of Mason Island with a 12-foot small boat opening at the causeway bridge, together with necessary gates and stoplogs; a land dike about 450 feet long, with crest elevation 16.5 feet above mean sea level, on the west side of Mason Island with a gated drainage structure; and two land dikes with crests 15.5 feet above mean sea level, having a total length of about 2,000 feet on the mainland northeast of Mason Island, together with necessary appurtenances.

*Estimated cost (price level of 1960).*—

Federal.....	\$1, 490, 000
Non-Federal.....	638, 000
Total.....	2, 128, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$57, 000	\$27, 400	\$84, 400
Maintenance and operation.....	1, 000	14, 800	15, 800
Estimated tax loss.....		200	200
Total.....	58, 000	42, 400	100, 400
Annual benefits:			
Damages prevented.....			165, 000
Elimination of emergency cost.....			10, 000
Total.....			175, 000



*Benefit-cost ratio.*—1.7.

*Local cooperation.*—(a) Provide all lands, easements, and rights-of-way necessary for construction of the project; (b) accomplish all relocations and alterations of sewerage and drainage facilities, buildings, utilities, highways, and other structures made necessary by the construction; (c) bear 30 percent of the total first cost, a sum presently estimated at \$638,000, to consist of the items listed in (a) and (b) above and a cash contribution now estimated at \$549,000, to be paid either in a lump sum prior to initiation of construction, or in installments prior to commencement of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, the final apportionment of cost to be made after actual costs and values have been determined; (d) hold and save the United States free from damages due to construction of the project; and (e) maintain and operate all the works after completion, except aids to navigation, in accordance with regulations prescribed by the Secretary of the Army. Local interests are willing to furnish the items of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

State of Connecticut: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### NAUGATUCK RIVER, ANSONIA-DERBY, CONN.

(H. Doc. 437, 87th Cong.)

*Location.*—The city of Ansonia and the town of Derby are adjoining communities located in southern Connecticut, on the Naugatuck River about 12 miles above Long Island Sound.

*Authority.*—A resolution of the Public Works Committee of the U.S. Senate adopted September 14, 1955, and similar resolutions of the Public Works Committee of the House of Representatives of the United States adopted June 13, 1956, and June 23, 1956, respectively.

*Existing project.*—Federal flood-control improvements in the basin affecting Ansonia-Derby consist of seven reservoirs, for flood control, authorized by Congress. One reservoir, Thomaston, is located at mile 30 on the main stream and has been in operation for flood control since September 1960. None of the other reservoirs are under construction.

*Flood problem.*—Flooding of the Naugatuck River causes damages to residential, commercial, industrial, and other properties located in Ansonia-Derby and creates health, safety, and economic problems which adversely affect the welfare of the cities.

*Recommended plan of improvement.*—Provides for approximately 12,470 linear feet of levee and floodwall, with appurtenant works, for the protection of approximately 232 acres of industrial, commercial, and residential areas in Ansonia-Derby.

*Estimated cost (price level of January 1960).*—

Federal	-----	\$5, 620, 000
Non-Federal	-----	380, 000
Total	-----	6, 000, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$208,900	\$15,200	\$224,100
Maintenance and operation.....	0	10,700	10,700
Net loss of productivity.....	0	2,300	2,300
Total.....	208,900	28,200	237,100
Annual benefits:			
Damages prevented.....			206,000
Enhancement from reduction of flood hazard.....			84,000
Total.....			290,000

*Benefit-cost ratio.*—1.2.

*Local cooperation.*—(a) Contribute in cash because of the more costly plan desired by local interests for the River Street area, 1.4 percent of the construction cost, presently estimated at \$80,000, to be paid either in a lump sum prior to start of construction or in installments prior to start of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, the final contribution to be determined after actual costs are known; (b) provide, without cost to the United States, all lands, easements, and rights-of-way necessary for construction of the project, including changes to highway bridges and roads, railroad track, sewers, and other utilities; (c) hold and save the United States free from damages due to the construction works; (d) maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; and (e) prevent encroachment on the improved channels or on the ponding areas, and if capacities are impaired, provide equivalently effective storage or pumping capacity without cost to the United States. Local interests are willing to furnish the items of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

State of Connecticut: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

RONDOUT CREEK AND WALLKILL RIVER, N.Y. AND N.J.

(S. Doc. 113, 87th Cong.)

*Location.*—Rondout Creek drains 1,197 square miles in southern New York and northern New Jersey and empties into the Hudson River, near Kingston, N.Y. Its principal tributary, Wallkill River, drains 786 square miles and enters the main stem just below Lefever Falls, 7.5 miles above the creek mouth.

*Authority.*—The report is in partial response to two resolutions of the Senate Public Works Committee adopted September 14, 1955, and November 14, 1955.

*Existing project.*—Clearing and snagging on Rondout Creek at Rosendale and upstream locations was authorized in April 1956 and completed in April 1957.



*Flood problem.*—Floods affect over 23,800 acres of rural land of the 250 acres of affected urban area, approximately 200 acres are located in Rosendale and Ellenville. At Rosendale, the flood of October 1955 was the most severe following by 2 months the previous record flood of August 1955. One drowning occurred along Beer kill. Average annual damages on Rondout Creek are \$247,600; on Sandburg Creek, \$267,400; and on Wallkill River and tributaries, \$367,300.

*Recommended plan of improvement.*—The only localities for which protective works are economically justified at this time are Rosendale and Ellenville. At Rosendale improvements would be made on Rondout Creek primarily by channel excavation, floodwall and levee construction, ponding areas, a pump station, utility and road changes, and drainage structures. At Ellenville improvements would be made on Beer kill and Fantine kill by the construction of floodwalls, levees, and channel improvements with appurtenant ponding areas, drainage structures, utility changes, and bridge replacements and alterations; and improvement of north gully, by a concrete chute, bridge reconstruction, upstream debris dam, utility changes, and drainage structures.

*Estimated cost (price level of June 1960).—*

Federal.....	\$5, 111, 000
Non-Federal.....	836, 100
Total.....	5, 947, 100

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$193, 700	\$30, 200	\$223, 900
Maintenance and operation.....	0	24, 500	24, 500
Major replacements.....	0	5, 100	5, 100
Total.....	193, 700	59, 800	253, 500
Annual benefits: Damages prevented.....			311, 800

*Benefit-cost ratio.*—1.2 to 1.

*Local cooperation.*—Furnish without cost to the United States all lands, easements, and rights-of-way necessary for construction of the improvements; hold and save the United States free from damages due to the construction works; perform without cost to the United States all alterations of highways, highway bridges, utility and related facilities made necessary for construction of the project: protect the channels, ponding areas, and other flood-control works from future encroachment or obstruction that would reduce their flood-carrying capacity and control development of the fringe areas not protected by the proposed improvement with a view to preventing an undue increase in the flood-damage potential; and maintain and operate each usable element of the work after completion of the element and of all the works after completion thereof in accordance with regulations prescribed by the Secretary of the Army. Local interests have indicated their willingness to cooperate in them.



*Comments of the State and Federal Agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education and Welfare: Favorable.

Department of Commerce: Favorable.

State of New York: Favorable.

State of New Jersey: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

## RARITAN BAY AND SANDY HOOK BAY, N.J.

(H. Doc. 464, 87th Cong.)

*Location.*—21-mile length of Shores of Raritan and Sandy Hook Bays between South Amboy and Highlands. The western end is about 30 miles southwest of midtown New York City.

*Authority.*—Section 2 of River and Harbor Act of July 3, 1930, pertaining to cooperative beach erosion control investigations; and Public Law 71, 84th Cong., 1st sess., June 15, 1955, pertaining to hurricane investigations of the eastern and southern seaboard.

*Existing project.*—None for hurricane or beach protection. Federal Government through the Works Progress Administration participated in constructing some protective works. Under authorized Navigation projects jetties at Cheesequake Creek were built in 1882–83 at a cost of \$40,000, and the breakwater off Atlantic Highlands was completed in 1940 at a cost of \$562,726, of which local interests contributed \$53,790. Since 1929 considerable productive work has been accomplished by local interests at a cost of about \$1 million.

*Problem.*—There is a need for protection of shore areas from erosion by wave attack and from inundation from storm tides.

*Recommended plan of improvement.*—Provides for (a) construction of 8,800 feet of beach fill and 1,940 feet of tie-back levee with necessary interior drainage facilities and road crossings in Madison Township; (b) construction of 4,800 feet of beach fill in Matawan Township; (c) 3,000 feet of beach fill at Union Beach; and (d) construction of 14,150 feet of each fill, 13,290 feet of tie-back levee, and three rock groins to be provided when required together with interior drainage facilities and road crossing at Keansburg, and East Keausburg. Provides for reimbursement to local interests of \$57,000 as the Federal share of the costs incurred by them in accomplishing the beach protection work at Keausburg in 1957.

*Estimated cost (price level May 1960).—*

Federal.....	\$3, 097, 000
Non-Federal.....	1, 651, 000
Total.....	4, 748, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$111, 400	\$60, 000	\$171, 400
Maintenance and operation.....		72, 800	72, 800
Total.....	111, 400	132, 800	244, 200
Annual benefits:			
Hurricane protection.....			360, 500
Shore protection.....			178, 300
Total.....			538, 800

*Benefit-cost ratio.—2.2.*

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way, including borrow areas necessary for construction of the project; accomplish without cost to the United States all alterations and relocations of buildings, streets, storm drains, utilities, and other structures made necessary by the construction; bear 35.2 percent of the total first cost consisting of the items stated above and a cash contribution to be paid either in a lump sum prior to initiation of construction or in installments prior to commencement of construction of pertinent items, in accordance with construction schedules as required by the Chief of Engineers, the final apportionment of cost to be made after actual costs and values have been determined; hold and save the United States free from damages due to the construction works; maintain all the works after completion in accordance with regulations prescribed by the Secretary of the Army; maintain during the economic life of the project continual public ownership of the non-Federal publicly owned shares and continual availability for public use of privately owned shore equivalent to that upon which the recommended Federal participation is based; control water pollution to the extent necessary to safeguard the health of bathers; obtain approval of the Chief of Engineers of detailed plans and specifications for the work contemplated and arrangements for its prosecution, prior to commencement of any work on the recommended beach-protection phase of the project at Matawan Township and Borough of Union Beach or the beach-protection phase of the project at Madison Township for which Federal participation is planned, if undertaken separately from the recommended combined improvement; construct, concurrently with the recommended beach fill, suitable parking fields and bathhouses open to all on equal terms; and at least annually inform interests affected that the hurricane improvements will not provide substantial protection from bay surges higher in elevation than that of hurricane Donna, September 12, 1960. Local interests have indicated willingness to comply with the requirements of local cooperation.

*Comments of the State and Federal agencies.—*

Department of Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of New Jersey: Favorable.

*Comments of the Bureau of the Budget.*—No objections.

## JUNIATA RIVER AND TRIBUTARIES, PENNSYLVANIA

(H. Doc. 565, 87th Cong.)

*Location.*—Juniata River is located in south central Pennsylvania, and is formed by the junction of the Frankstown Branch and Little Juniata River. Meandering 102 miles easterly, the Juniata River joins the Susquehanna River about 84 miles above Chesapeake Bay. Raystown Branch is the largest tributary of the Juniata River.

*Authority.*—This report is in full response to authority provided in section 11 of the Flood Control Act approved December 22, 1944, and in section 204 of the Flood Control Act approved September 3, 1954.

*Existing project.*—The only Federal flood control project in the Juniata River Basin is one for local protection at Tyrone, Pa., authorized by the Flood Control Act approved December 22, 1944. It provides for the construction of a levee, floodwalls, improved channels, pressure conduits, and pertinent works, at an estimated cost to the United States, revised in 1960, of \$9,400,000. Local cooperation has not been furnished and no work has been performed.

*Flood problem.*—The area subject to floods by the Juniata River extends throughout the entire length of the basin and is both urban and rural. Towns and villages affected are Williamsburg, Tyrone, Huntingdon, Smithfield Township, Bedford, Everett, Mount Union, Lewistown, Mifflin, and Newport. In the basin are farms and residences, business and commercial establishments, public utilities, railroads, and highways, all of which are subject to floods. The greatest losses were caused by the March 1936 flood. Floods have caused damages in excess of \$14 million from 1936 to the present based on damage estimates made after each flood and on prices then current.

*Recommended plan of improvement.*—The most suitable plan of improvement to serve the water-resource needs of the basin would consist of a multiple-purpose reservoir on the Raystown Branch to provide for flood control, hydroelectric power, recreation, fish and wildlife, and low-flow augmentation for water-quality improvement. The recommended plan consists of a dam and earthfill construction with a maximum height of 225 feet above the streambed and a length of about 1,770 feet; a spillway controlled by gates, located in a saddle of a ridge near the damsite; a powerhouse located downstream from the dam; three tunnels through the ridge to supply the turbines; a re-regulating dam, located at river mile 0.5, provided to reduce fluctuation of discharges from the peaking power operation; preservation of the sites against incompatible development; and provided that installation of the power generating facilities shall not be made until the Chief of Engineers shall submit a reexamination report to the Secretary of the Army for approval of the President.



*Estimated cost (price level of 1960).—*

Federal.....	\$77, 361, 000
Non-Federal.....	0
Total <sup>1</sup> .....	77, 361, 000

<sup>1</sup> \$32,150,000 without power as recommended by committee.

*Project economics.—***Annual charges (all Federal) :**

Interest and amortization.....	\$2, 796, 000
Economic cost of land.....	136, 000
Operation, maintainance, and replacement.....	600, 000
Taxes foregone.....	1, 100, 000
Total.....	4, 632, 000

**Annual benefits:**

Power.....	4, 189, 000
Recreation.....	1, 104, 000
Flood control.....	576, 000
Fishery.....	84, 000
Water quality.....	70, 000
Total.....	6, 023, 000

*Benefit-cost ratio.—1.3.**Local cooperation.—None.**Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Public Health Service: Favorable.

Federal Power Commission: Favorable.

Commonwealth of Pennsylvania: Favorable.

*Comments of the Bureau of the Budget.*—Advises that there would be no objection to submission of the report to Congress, subject to consideration of the following: That it would be preferable for authorization of the power-generating facilities to await completion and consideration by Congress of the reexamination report proposed by the Chief of Engineers, under normal preauthorization procedures; that if power-generating facilities should be conditionally authorized at this time, the reexamination report to be prepared for submission to the Secretary of the Army and approval by the President should take full cognizance of the plans of the investor-owned public utilities in the area, and contain information in sufficient detail to demonstrate that inclusion of hydroelectric power facilities in the project is financially feasible in the light of pertinent reimbursement and repayment policies in effect at the time; that the Congress should be furnished with more detailed data relative to a project without power but with provisions for future installation at the time the project is being considered for authorization; and that the Secretary of the Army may wish to consider deferring submission of the report to Congress pending completion of the comprehensive survey of the Susquehanna River now being undertaken by the Corps of Engineers.

*Remarks.*—The committee notes that construction of the dam and reservoir on the Raystown Branch of the Juniata River is urgently needed to reduce flood heights along the Juniata River below the

dam and the lower reaches of the Susquehanna River. In addition, it notes that the reservoir created by the dam will meet a growing demand in the area for public outdoor water-associated recreation and for conservation of the fish and wildlife resources. In view of the considerable opposition to inclusion of power as a feature of the Raystown project, the committee recommended the project with power features eliminated. It notes that a project without power will fully serve the remaining purposes and is economically justified. The committee notes that if the Chief of Engineers deems it desirable, he may submit a reexamination report on the power generating features to the Congress for its consideration. The Federal cost of the project with the power features eliminated is \$32,150,000.

DELAWARE RIVER BASIN, N.Y., N.J., PA., AND DEL.

(H. Doc. 522, 87th Cong.)

*Location.*—The Delaware River drains a relatively long, narrow area in the Northeastern United States. The area extends approximately 265 miles southward from the western slopes of the Catskill Mountains in New York to the Atlantic Ocean at the mouth of Delaware Bay between Cape May in New Jersey and Cape Henlopen in Delaware. The basin boundary encompasses 2,362 square miles in southeastern New York, 6,422 square miles in eastern Pennsylvania; 2,969 square miles in western New Jersey; 1,004 square miles in Delaware; 8 square miles in the northeastern corner of Maryland, and 782 square miles of water surface in Delaware Bay.

*Authority.*—Resolution, Senate Committee on Public Works, adopted September 14, 1955, and other resolutions.

*Existing project.*—Federal improvements by the Corps of Engineers consist of the Prompton and Edgar Jadwin Reservoirs in the Lackawaxen River Basin, the Bear Creek Reservoir on Lehigh River and local protection works at Allentown and Bethlehem, Pa., SCS programs are underway on four watersheds and planned for 16 other watersheds. Authorized Federal navigation projects for the Delaware River provide for a channel 40 feet deep from the sea for 126.3 miles to Newbold Island, thence 35 feet deep for about 5½ miles to Trenton, thence 12 feet deep for about 1¼ miles to the head of navigation. Appurtenant facilities and numerous tributary channels on both sides of Delaware River and Bay also are provided under the existing project.

*Flood problems.*—Major floods in the Delaware River Basin are usually associated with severe storms resulting in widespread heavy precipitation and often accompany hurricanes. The area of major flood damages along the main stem of the Delaware River lies along the 95-mile reach from Delaware Water Gap, Pa., to Burlington, N.J. Damage centers at Honesdale and Hawley in the Lackawaxen Basin are now afforded protection by reservoirs and local protection works. In the Lehigh River Basin, the Bear Creek Reservoir, and local protection works provide protection for damage centers at Weissport, Allentown, and Bethlehem, but areas elsewhere in the basin are subject to recurring flood damages. In the Schuylkill Basin major floods occur along the 75 miles of the main stream of the Schuylkill River.



*Recommended plan of improvement.*—The plan of improvement consists of 11 major control projects to be constructed prior to the year 2010; 8 major control projects to be developed for recreation prior to 2010, with water supply to be added subsequently; and 39 small control projects to be developed under continuing authorizations, subject to the desires of local interests. Of the 11 major control projects to be constructed prior to 2010, all would provide for water supply and recreation, 8 would provide for flood control storage and 2 for generation of hydroelectric power. Recreation potentials at the 11 major projects proposed for early development were appraised both for that directly related to the basic water control project and for that indirectly related to the basic water control project and its directly related recreation potentials. Cost allocations were based on the basic project without consideration of the indirect values except in the case of the Tocks Island project where it was found that the widespread regional and national significance of the recreation opportunities warranted the apportionment of all specific and allocated recreation costs to Federal costs. Also, it was found that at the Tocks Island project the development of pumped storage hydroelectric facilities would probably be feasible as either a Federal or non-Federal venture. However, because of difficulties in firmly assessing production costs and power values authority for construction of the pumped storage features was not recommended. The recommended plan would reduce average annual flood damages about 43 percent along the principal waterways and about 33 percent in the upstream areas. The plan, also, would meet streamflow requirements for the basin to year 2010, including authorized diversions.

*First costs and annual O.M. & R.*—The first cost of the long-range plan of development of the water resources of the Delaware River Basin consisting of a 58-reservoir system, is estimated at \$591 million, of which the initial and ultimate Federal costs are estimated at \$232 million, and \$143 million, respectively. The plan of development provides for Federal construction of six reservoirs and modification of two authorized projects, which are included in the comprehensive plan, at initial and ultimate Federal costs estimated at \$224 million, and \$135 million, respectively. The following table lists the projects in the comprehensive plan, together with estimated Federal and non-Federal costs of construction and annual maintenance.



*Comprehensive plan of development, Delaware River Basin*

[Costs in thousands of dollars. Totals may not agree with sums due to rounding]

Project	Purpose	Costs					
		Construction			Annual operation, maintenance, and replacement		
		Federal	Non-Federal <sup>1</sup>	Total	Federal	Non-Federal <sup>1</sup>	Total

MAJOR CONTROL PROJECTS							
Hawk Mountain .....	(2)	-----	42,000	42,000	-----	291	291
Newark .....	(3)	-----	15,300	15,300	-----	190	190
Christiana .....	(2)	-----	18,000	18,000	-----	302	302
Subtotal .....			73,300	75,300	-----	783	783
Prompton <sup>4</sup> .....	(3)	470	4,500	4,970	30	54	84
Tocks Island .....	(6)	93,500	28,500	122,000	1,872	98	1,970
Bear Creek <sup>4</sup> .....	(3)	4,290	9,110	13,400	56	64	120
Beltzville .....	(3)	6,260	7,540	13,800	60	48	108
Aquashicola .....	(6)	8,600	10,400	19,000	41	44	85
Trexler .....	(3)	4,330	5,770	10,100	57	47	104
Maiden Creek .....	(3)	9,800	17,800	27,600	83	55	138
Blue Marsh .....	(6)	7,090	5,410	12,500	73	38	111
Subtotal .....		134,900	89,100	224,000	2,260	450	2,710
Total .....		134,900	164,400	299,300	2,260	1,240	3,500

MAJOR PROJECTS TO BE DEVELOPED IN TWO STAGES <sup>7</sup>

Paulina.....	(3)	-----	23,100	23,100	-----	221	221
Pequest.....	(3)	-----	16,300	16,300	-----	115	115
Hackettstown.....	(3)	-----	28,000	28,000	-----	553	553
New Hampton.....	(3)	-----	29,600	29,600	-----	332	332
Tohickon.....	(3)	-----	21,800	21,800	-----	276	276
Newton.....	(3)	-----	46,400	46,400	-----	415	415
French Creek.....	(3)	-----	18,700	18,700	-----	332	332
Evansburg.....	(3)	-----	23,800	23,800	-----	345	345
Total.....		-----	208,000	208,000	-----	2,590	2,590

## SMALL CONTROL PROJECTS

Parkside.....	(8)	1,000	<sup>9</sup> 21	1,020	-----	0.3	0.3
Swiftwater.....	(8)	1,030	<sup>9</sup> 47	1,080	-----	.3	.3
Jim Thorpe.....	(8)	445	<sup>9</sup> 24	469	-----	.3	.3
36 small projects.....	(10)	6,270	782	7,060	-----	11	11
Total.....		8,750	874	9,630	-----	12	12
Total plan.....		143,000	374,000	517,000	2,260	3,840	6,100
Total plan <sup>11</sup> .....		203,000	388,000	591,000	5,940	4,360	10,300

<sup>1</sup> Excludes costs and benefits for indirectly related recreation except at Tocks Island.<sup>2</sup> Water supply, recreation, and power.<sup>3</sup> Water supply and recreation.<sup>4</sup> Costs and benefits for adding water supply and recreation to existing flood-control project.<sup>5</sup> Water supply, recreation, fish and wildlife and flood control.<sup>6</sup> Water supply, recreation, fish and wildlife, flood control, and conventional power.<sup>7</sup> Operation, maintenance, and replacements costs are for initial stage only.<sup>8</sup> Flood control and recreation.<sup>9</sup> Excludes nominal amount for optional recreation facilities.<sup>10</sup> Flood control.<sup>11</sup> Includes pumped-storage hydro at Tocks Island and indirect recreation in other 18 major projects.

*Project economics—**Costs and benefits in thousands of dollars*

[Totals may not agree with sums due to rounding]

Project	Annual economic cost <sup>1</sup>	Annual benefits					Benefit-to-cost ratio	Estimated date of need
		Flood control	Directly related recreation	Power	Water supply	Total <sup>1</sup>		
MAJOR CONTROL PROJECTS								
Hawk Mountain.....	2,760	-----	291	755	2,180	3,220	1.2	2001
Newark.....	998	-----	876	-----	794	1,670	1.7	1975
Christiana.....	1,260	-----	1,730	-----	639	2,370	1.9	1980
Prompton <sup>2</sup> .....	349	295	130	-----	307	437	1.3	1974
Tocks Island.....	7,700	1,460	10,000	1,820	3,800	17,100	2.2	1975
Bear Creek <sup>2</sup> .....	714	1,060	161	-----	1,300	1,461	2.1	1989
Beltzville.....	683	286	174	-----	669	1,130	1.7	1965
Aquashicola.....	876	293	159	-----	485	936	1.1	1981
Trexler.....	553	114	281	-----	464	858	1.6	1972
Maiden Creek.....	1,390	244	424	-----	833	1,501	1.1	1982
Blue Marsh.....	643	302	217	-----	531	1,050	1.6	1969

MAJOR PROJECTS TO BE DEVELOPED IN TWO STAGES <sup>3</sup>

Paulina.....	766	-----	960	-----	-----	960	1.3	-----
Pequest.....	350	-----	499	-----	-----	499	1.4	-----
Hackettstown.....	1,420	-----	2,400	-----	-----	2,400	1.7	-----
New Hampton.....	1,040	-----	1,440	-----	-----	1,440	1.4	-----
Tohickon.....	898	-----	1,200	-----	-----	1,200	1.3	-----
Newton.....	1,970	-----	1,800	-----	-----	1,800	.9	-----
French Creek.....	876	-----	1,440	-----	-----	1,440	1.6	-----
Evansburg.....	1,170	-----	1,500	-----	-----	1,500	1.3	-----

SMALL CONTROL PROJECTS <sup>4</sup>

Parkside.....	37	42	-----	-----	-----	42	1.1	-----
Swiftwater.....	39	71	-----	-----	-----	71	1.8	-----
Jim Thorpe.....	17	18	-----	-----	-----	18	1.03	-----
36 small projects.....	267	457	-----	-----	-----	457	1.7	-----

<sup>1</sup> Excludes costs and benefits for indirectly related recreation except at Tocks Island. Costs and benefits for Tocks Island include \$3,476,000 and \$6,341,000, respectively, for indirectly related recreation.

<sup>2</sup> Costs and benefits for adding water supply and recreation to existing flood control projects.

<sup>3</sup> Site acquisition for recreation immediately and development for water supply as needed.

<sup>4</sup> To be accomplished under existing authorities and continuing programs.

*Local cooperation.*—Local interests are required to give assurances that they will:

(1) Make demands for the use of water storage within a period which will permit paying out of the costs allocated to water supply within the life of the project; such costs to be determined by applying the percentages given in the report to actual costs for construction, operation, maintenance, and major replacement. These water supply costs are presently estimated at \$89,100,000 for construction and \$450,000 annually for maintenance, operation, and major replacements.

(2) Prevent encroachment on the stream channels downstream from the reservoirs to the extent needed to provide reasonably efficient reservoir operation.

(3) Hold and save the United States free from all water-rights claims resulting from construction and operation of the reservoirs; and

(4) Agree to undertake establishment and prosecution of programs for the acquisition of lands, and to develop facilities as needed for the recreation developments assigned to them.

*Comments of States, municipalities, and Federal agencies.—*

State of New York: No objections to approval of eight major projects in which the Federal Government would participate but reserved any statement relative to the remainder of the plan until the basin commission has considered the plan.

State of New Jersey: Approved the eight major projects in which the Federal Government would participate but preferred to refrain from comment on the remainder of the plan until the basin commission has considered the plan.

State of Delaware: Objected to grouping of counties by sub-regions as used in the report; cited the urgent need for additional pollution investigations and water quality recovery research; contended that the report placed primary emphasis upon surface waters and relegated Delaware's water problems to a localized minor role; from a comparison of potentials, concluded that the two proposed reservoirs in Delaware and the Tocks Island Reservoir would be equally of national significance with regard to recreation; expressed the feeling that the flood damages in Delaware were not given sufficient coverage; questioned the estimates of future irrigable land in Delaware as used in the report; objected to the report's failure to include in the plan of development the alternate sources of water to meet Delaware's needs; questioned the treatment of the water supply potentials of the proposed Brandywine development as planned by the Commonwealth of Pennsylvania; and pointed out the continuing need for information on water uses and the need to keep the planning report a "living document."

Commonwealth of Pennsylvania: Urged that attention and urgency be given to the construction of small reservoirs under Public Law 566 and Public Law 685; expressed the view that low flow augmentation will be needed to insure reasonable water quality in the Delaware Basin; stated that the proposed Hawk Mountain project would adversely affect trout and bass fisheries in that area; requested that consideration be given to the provision of workable fish passing facilities in the proposed dams; and, except as noted, gave general approval to the proposed plan.

City of Philadelphia: Expressed concern over the treatment in the report of water quality and quantity; objected to lack of data on direct and indirect costs of the plan to the city of Philadelphia; requested evidence that the costs and benefits would be shared equitably by all parties; and pointed out that the city did not participate directly in writing the report.

City of New York: Generally favorable with comments to clarify the influence, on the plan, of New York City's existing Delaware operations.

Department of Commerce: Pointed out the inadequacy of existing control and map information for the area; agreed with estimates of highway relocation costs with one major exception and suggested coordination with State highway officials; found that Commerce could not concur in proposal for advance acquisition



to preserve reservoir sites unless financing of the relocation of affected highways is included in the proposal; and noted that the effects of the projects on highway transportation costs had not been included in the economic analyses.

Department of Labor: Acknowledged receipt of report and offered no comment.

Department of the Interior: Concurred generally in the proposed plan and the request for authorization to construct six major control projects and modify two existing Federal projects; assumed plan will be subject to continuing study, review, and modification as warranted; concurred in finding of national significance of Tocks Island recreation and full Federal funding; proposed modification of report to provide authority for corps to acquire land for conservation and development of fish and wildlife; concurred in proposal for advance acquisition of sites; agreed that proposed Tocks Island project be recommended for authorization and that further study be undertaken before conclusions regarding adjacent pumped storage potentials; requested further study of mineral activities at certain project sites; and agreed generally with the substance and recommendations of the report except as noted above.

Department of Agriculture: Noted that the report points out the need for programs concerned with the use and treatment of land and cover and advised that such programs are now underway in the basin by the Department of Agriculture; pointed out that the small control projects were appraised only for flood control and expressed the belief that additional small control project would be found economically feasible if appraised for multiple purposes; and requested that the report recommended Federal development of the power potential, including pumped storage, found economically feasible with provisions requiring preference to public bodies and cooperatives in the disposition of the powers.

Department of Health, Education and Welfare: Noted that the report contains no discussion of possible pollution control benefits; repeated USPHS recommendations regarding programs for water quality management and data collection; and recommended adoption of the vector control program as an integral part of the comprehensive plan.

Federal Power Commission: Reviewed the findings of the report with respect to power and concluded that the proposed plan will serve as a useful guide for continuing studies of efficient utilization of the water resources of the basin.

*Comments of the Bureau of the Budget.*—No objection to submission of report to Congress. However, considers that in view of recent legislation approving the Delaware compact and creating the Delaware River Basin Commission, the formal adoption by Congress of the recommended comprehensive plan for the Delaware River Basin is unnecessary but believes the eight projects recommended for construction should be authorized. Also, in connection with the complete development of the recreation potentials of the Tocks Island project, wholly at Federal expense, the Director of the Bureau of the Budget finds that such development would be appropriate and in accord with the program of the President, provided suitable entrance, admission, and other user fees are established.

## NORTH BRANCH, POTOMAC RIVER, MD. AND W. VA.

(H. Doc. 469, 87th Cong.)

*Location.*—The North Branch of Potomac River rises near the western boundary of Maryland, flows generally northeast between Maryland and West Virginia, and joins the South Branch about 20 miles below Cumberland, Md., to form the Potomac River. It drains 1,328 square miles of predominantly mountainous terrain with elevations ranging from 4,860 to 600 feet above mean sea level.

*Authority.*—In full response to House Public Works Committee resolution adopted July 29, 1955, and in partial response to resolutions of the Senate Public Works Committee adopted September 14, 1955, January 26, 1956, and July 6, 1959, as amended April 27, 1960, and to resolution, House Public Works Committee adopted August 16, 1950.

*Existing project.*—A local flood-protection for Cumberland, Md., and Ridgeley, W. Va., completed in May 1959, provides for channel improvements, floodwalls and levees, interior drainage facilities, and an industrial dam. The cost to the Federal Government for new work was \$15,600,000, exclusive of \$1,400,000 contributed by local interests and \$50,000 from emergency relief funds. Additional items such as bridges, streets, and rights-of-way increased the total cost to local interests to \$2,900,000. In 1939, the Works Progress Administration, under sponsorship of the Upper Potomac River Commission, initiated construction of an earth and rockfill dam on Savage River about 4.5 miles above its junction with the North Branch. Work was suspended in 1942 because of World War II, and resumed in 1949 under supervision of the Corps of Engineers. The project was completed in January 1952 and transferred to the Upper Potomac River Commission on July 1, 1953, for operation and maintenance. The total cost was \$6,237,000, of which \$1,142,000 was contributed by local interests. The reservoir capacity of 20,000 acre-feet permits regulation of stream flow for industrial and domestic water supply and pollution abatement and provides some incidental flood control.

*Flood problems.*—Six damaging floods have occurred in the past 23 years. Over 11,000 acres of valley land along the North Branch and its tributaries have been subjected to frequent and severe floods. Urban areas have been flooded to depths of 10 feet. The largest flood above Cumberland in recent years occurred in March 1924 and caused the loss of five lives. Recurrence of that flood with present stage of development and with Savage River reservoir in operation would cause damages of \$5,200,000. Average annual flood damages under present conditions are \$891,800.

*Recommended plan of improvement.*—Provides for construction on the North Branch of Potomac River, Md., and W. Va., of a dam and reservoir in the vicinity of Bloomington, Md., for flood control, water supply, water quality control and recreation, generally in accordance with the plan of the district engineer. The dam would be a concrete gravity structure with an earth fill embankment on the right abutment, approximately 1,930 feet long, with a maximum height of about 287 feet above the stream bed. The dam would contain a gated spillway controlled three tainter gates.



*Estimated cost (price level of January 1961).—*

Federal.....	\$50,965,000
Non-Federal.....	( <sup>1</sup> )
Total.....	50,965,000

<sup>1</sup> \$16,935,000 to be reimbursed by local interests for water supply.

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$1,288,000	\$690,800	\$1,978,800
Maintenance operations and major replacements.....	145,000	55,000	200,000
Economic cost of land.....	7,500	6,000	13,500
Total.....	1,440,500	751,800	2,192,300
Annual benefits:			
Damages prevented.....			585,300
Water supply.....			1,283,300
Water quality.....			1,593,400
Recreation.....			120,700
Total.....			3,582,700

*Benefit-cost ratio.—1.6.*

*Local cooperation.*—The requirements of local cooperation consist principally of the repayment of costs allocated to low-flow augmentation. Local interests must agree to pay all the costs allocated to water supply amounting to 33.2 percent of the construction cost of the project and presently estimated at \$16,935,000, to be paid either in a lump sum prior to commencement of construction or in installments prior to commencement of pertinent work items in accordance with construction schedules as required by the Chief of Engineers; or as an alternative, contract with the United States to repay, within a period of 50 years, a portion of the costs allocated to water supply on the basis of initial requirements, amounting to 5.8 percent of the construction cost and presently estimated at \$2,943,000, plus interest during construction on this amount, with interest on the unpaid balance and with payments to begin when storage is first available for water supply; furnish assurances satisfactory to the Secretary of the Army that they will repay the remaining costs allocated to water supply on the basis of future requirements, amounting to 27.4 percent of the construction cost, presently estimated at \$13,992,000, plus interest during construction on this amount with interest on the unpaid balance, beginning 10 years after storage is first available for water supply and with final payment to be made 50 years thereafter, except that no interest will be charged thereon for the first 10 years after storage is first available for water supply; contract with the United States to pay the operation and maintenance costs allocated to water supply presently estimated at \$47,000 annually, beginning when storage is first available for water supply; agree to pay the major replacement costs allocated to water supply as such costs are incurred, presently estimated to average \$8,000 annually; furnish assurances satisfactory to the Secretary of the Army of their intent to control pollution of the streams subject to low-flow augmentation by adequate treatment or other methods of controlling wastes at their source; and furnish assurances satisfactory to the Secretary of the Army that they



will protect downstream channels from encroachments which would adversely affect operation of the project. Many beneficiaries are involved. At present no entity has agreed to furnish the required local cooperation. Establishment of a legally constituted local body capable of performing this function is essential and is under consideration.

*Comments of the State and Federal Agencies.—*

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Department of Health, Education and Welfare: Favorable.

Department of Agriculture: Favorable.

Federal Power Commission: Favorable.

National Capital Regional Planning Council: Favorable.

Chairman, Interstate Commission on Potomac River: Favorable.

District of Columbia: Favorable.

State of West Virginia: Favorable.

Commonwealth of Pennsylvania: Favorable.

Commonwealth of Virginia: Favorable.

State of Maryland: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

NORFOLK, VA.

(H. Doc. 354, 87th Congress)

*Location.*—Norfolk, Va., is on the port of Hampton Roads, about 180 miles southeast of Washington, D.C., and about 20 miles west of the confluence of Chesapeake Bay and the Atlantic Ocean. The major portion of the city's shore frontage is on the Elizabeth River and its Eastern Branch, and is not exposed to high waves from Chesapeake Bay and the Atlantic Ocean.

*Authority.*—In partial response to Public Law 71, 84th Congress, 1st session, approved June 15, 1955.

*Existing project.*—There are no existing or authorized hurricane projects in the area. The existing Federal navigation project provides for depths of 40 feet in Elizabeth River, 18 to 25 feet in the Eastern and Western Branches, and 12 feet in the short channel up Scotts Creek. The Elizabeth River and its Southern Branch are segments of the Atlantic Intracoastal Waterway.

*Flood problem.*—The downtown section of the city of Norfolk is subject to periodic flooding from hurricanes and northeast storm tides. This salt water flooding causes damages to commercial, residential, and other properties located in the low-lying areas and creates health, safety, and economic problems which adversely affect the welfare of the city.

*Recommended plan of improvement.*—Provides for a floodwall extending for about 2,750 feet from a grade point near Tazwell and Duke Streets along Tazwell, Boush, Main, Matthews, Water, and Granby Streets to a grade point in the rear of the U.S. custom house, together with six closure structures and necessary adjustments to railroad and street crossings adjacent thereto; a storm drain pump station at the foot of the City Hall Avenue, together with necessary collector lines and appurtenances; and a sanitary sewage lift station in the floodwall

at Fayette and Water Streets, together with necessary collector lines, force mains, valve chambers, and appurtenances. Subsequent to authorization of the recommended hurricane protection works, and with prior approval of the Chief of Engineers, if the city elects at its own expense to incorporate features in highway or other development works in the waterfront area which will serve the purpose of the hurricane protection works in the area of local construction, it is further recommended that the United States participate in the cost of such features on a basis such that the overall cost to the United States for hurricane protection shall not be greater than that which would apply in the absence of such features, and such that any resultant savings in the overall cost of the dual purpose features shall be shared equitably between the United States and the city on the basis of cost allocation and cost apportionment approved by the Chief of Engineers; provided that such participation in the dual purpose features shall be subject to the undertaking of any necessary remaining hurricane protection works by the United States.

*Estimated cost (price level of June 1959).—*

Federal.....	\$1, 537, 000
Non-Federal.....	724, 000
Total.....	2, 261, 000

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$60, 000	\$39, 500	\$99, 500
Maintenance and operation.....		15, 500	15, 500
Total.....	60, 000	55, 000	115, 000
Annual benefits: Damages prevented.....			178, 000

*Benefit-cost ratio.—1.5.*

*Local cooperation.*—(a) Provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project, at costs presently estimated at \$376,000; (b) accomplish without cost to the United States all relocations and alterations of sewerage and drainage facilities, buildings, utilities, and other structures made necessary by the work, exclusive of storm sewer, street, and railroad alterations forming an integral part of the protective works, at costs presently estimated at \$237,000; (c) bear 30 percent of the total first cost of the project, exclusive of betterments, a sum presently estimated at \$658,000, to consist of the items listed in subparagraphs (a) and (b) above and a cash contribution now estimated at \$45,000, to be paid either in a lump sum prior to initiation of construction, or in installments prior to commencement of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, the final apportionment of cost to be made after actual costs and values have been determined; (d) bear the entire cost of the items considered as betterments, including the sewage lift station, presently estimated at \$66,000; (e) hold and save the United States free from damages due to the construction work; and (f) maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army. Local



interests have indicated willingness and ability to furnish requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

State of Virginia: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### CAROLINA BEACH AND VICINITY, NORTH CAROLINA

(H. Doc. 418, 87th Cong.)

*Location.*—The area is in New Hanover County, about 15 miles southeast of Wilmington, N.C., on the peninsula which separates the lower Cape Fear River from the Atlantic Ocean. The study covers about 7 miles of the shore and the towns of Carolina Beach and Kure Beach, also unincorporated communities of Wilmington Beach and Hanby Beach.

*Authority.*—Section 2 of Public Law 520, 71st Congress, approved July 3, 1930, and Public Law 71, 84th Congress, approved June 15, 1955.

*Existing project.*—No hurricane or beach protection projects.

*Beach erosion and hurricane problem.*—Intermittent surveys of the shore and offshore depths since 1938 indicate alternate erosion and accretion with a net accumulative loss of beaches. During the period 1900 to 1959, 22 hurricanes have affected Carolina Beach and vicinity. Recurrence of the maximum hurricane tide of record caused by the hurricane of October 1954, under January 1960 prices and conditions, would cause inundation and wave damages in the area estimated at \$5,500,000. The average annual future tidal damages in the area are estimated at \$380,800.

*Recommended plan of improvement.*—Provides for construction of a dune with a crown width of 25 feet at elevation 15 feet, mean low water, together with an integrated beach berm of 50 feet wide at elevation 12 feet, mean low water, extending about 25,800 feet from northern limits of Carolina Beach to southern limits of Kure Beach; initial deposition of sufficient suitable material north of Carolina Beach to serve as a feeder beach; and Federal participation in the cost of beach nourishment for a period not to exceed 10 years from the year of completion of the initial placement.

*Estimated cost (price level of January 1960).*—

Federal	-----	\$739, 000
Non-Federal	-----	500, 000
Total	-----	1, 239, 000



*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$28,390	\$23,420	\$51,810
Maintenance and operation.....		14,600	14,600
Beach nourishment.....	6,600	50,100	56,700
Total.....	34,990	88,120	123,110
Annual benefits:			
Damages prevented.....			213,500
Emergency cost saved.....			5,300
Increased beach use.....			133,900
Increased property use.....			23,000
Total.....			375,700

*Benefit-cost ratio.*—3.1.

*Local cooperation.*—Furnish lands and rights-of-way; accomplish necessary relocations of buildings, streets, utilities, and other structures; bear 40.3 percent of the first cost consisting of the items above, and a cash contribution presently estimated at \$500,000; hold and save the United States free from damage; maintain the works and nourish the beach, except that for the first 10 years the Federal Government will contribute an amount estimated at \$6,600 annually for nourishment; maintain current public ownership and use; adopt ordinances to preserve the improvement; control water pollution; obtain prior approval by the Chief of Engineers of plans for the beach protection work; contribute in cash for wave-protection works in addition to the item above requiring a contribution of 40.3 percent, the added cost for separate construction of the beach-protection works presently estimated at \$123,000; and, annually inform local interests that the project will not provide substantial wave protection during ocean surges greater than Hurricane Hazel, October 15, 1954. Local interests have indicated their willingness to comply with the requirements of local cooperation.

*Comments of the State and Federal Agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: No objection.

Department of Health, Education, and Welfare: No objection.

State of North Carolina: Favorable.

*Comments of the Bureau of the Budget.*—No objection.CHATTAHOOCHEE RIVER AT AND IN VICINITY OF WEST POINT AND  
FRANKLIN, GA.

*Location.*—Chattahoochee River forms a portion of the border between Alabama and Georgia and drains the northcentral portion of Georgia. The Chattahoochee River drainage basin is 440 miles long and averages 30 miles wide. The Chattahoochee and Flint Rivers join to form the Apalachicola River.

*Authority.*—Resolutions by the Committee on Public Works of the House of Representatives adopted July 29, 1955, and July 31, 1957.

*Existing project.*—Buford Dam in the extreme upper watershed for flood control, hydroelectric power, navigation, and other purposes;

Jim Woodruff lock and dam on the lower river for navigation and hydroelectric power; and two other locks and dams on the Chattahoochee River which would provide navigation to Columbus, Ga., are nearing completion. The Soil Conservation Service has a small dam program on Bull Creek near Columbus, Ga. Many small privately owned dams for hydroelectric power.

*Problems.*—Buford Reservoir controls floods in the upper watershed. Average annual flood damage for the Chattahoochee River at and below West Point are estimated at \$600,000 principally in West Point, Columbus, and Phenix areas. There is also a growing demand for power in the area.

*Recommended plan of improvement.*—Construction of West Point Reservoir for hydroelectric power, flood control, navigation, and recreation. The dam would be located at river mile 201.4 and would form a reservoir of 553,000 acre-feet capacity; 282,000 acre-feet would be for power purposes except for flood control storage use of a maximum of 204,000 acre-feet from December through April. Storage of 158,000 acre-feet would also be usable for flood control above the power pool.

*Estimated cost (1961 price level).*—Federal, \$52,900,000.

*Project economics.*—

Annual charges:

Interest and amortization-----	\$1, 635, 000
Maintenance, operation, and replacement-----	518, 000
Taxes foregone-----	518, 000
Total-----	<u>2, 671, 000</u>

Annual benefits:

Flood control-----	481, 000
Power-----	2, 085, 000
Recreation-----	640, 000
Fish and wildlife-----	268, 000
Navigation-----	50, 000
Total-----	<u>3, 524, 000</u>

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Local interests shall agree to inform annually those affected, for a period of time as determined by the Chief of Engineers to be necessary, that the proposed project will provide partial protection from floods.

*Comments of the States and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: No objection.

Federal Power Commission: No objection.

Public Health Service, Department of HEW: No objection.

State of Alabama: Favorable.

State of Georgia: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget notes that the estimate of expected power revenues from the West Point project, furnished by the Southeastern Power Administration would be sufficient to repay the cost allocated to power only over a period of 100 years. The Bureau also notes that a major portion of the benefits and costs of this project have been assigned to power purposes.

The Bureau states that section 5 of the Flood Control Act of 1944 requires that power produced at reservoir projects under control of the Department of the Army be sold at rates which will recover costs of power production, and transmission, including capital investment allocated to power, over a reasonable period of years. The Bureau further states that, as a matter of policy, a period of 50 years has been considered appropriate for the recovery of power investment. Such a period was most recently affirmed by the Congress as a condition of the authorization of Laurel River Reservoir in the Flood Control Act of 1960.

Accordingly, the Bureau would expect that construction of the West Point Reservoir, if authorized by the Congress, would not be undertaken until there is specific assurance that all costs allocated to power can be returned with interest within a period of 50 years.

The Bureau of the Budget advises that there is no objection to the submission of the report to the Congress.

#### INTERIM REPORT ON SOUTH DADE COUNTY, FLA., CENTRAL AND SOUTHERN FLORIDA PROJECT

*Location.*—The area under consideration is in the southeastern section of Dade County, Fla., south of Miami along Biscayne Bay.

*Authority.*—Senate Public Works Committee Resolution, adopted November 15, 1954 (partial response).

*Existing project.*—The central and southern Florida project provides in part for a levee around the area considered in this report. This levee, designated as "L-31," and its control structures are for protection against most nonhurricane storm tides and for regulation of freshwater flow.

*Flood problem.*—There is need for an adequate system of canals to provide drainage for urban development, with water control structures to prevent overdrainage of lands and contamination of ground water by salt water encroachment.

*Recommended plan of improvement.*—The plan of improvement provides for construction of 12 major outlet canals to drain by gravity the south Dade County area involved.

*Estimate cost (price level of October 1960).—*

Federal.....	\$13,388,000
Non-Federal.....	7,065,000
Total.....	20,453,000

#### *Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Primary works:			
Interest and amortization.....	\$484,000	\$255,000	\$739,000
Maintenance and operation.....		115,000	115,000
Loss of productivity of lands (economic cost).....			40,000
Total primary works.....	484,000	370,000	854,000
Associated work.....		133,000	133,000
Total.....	484,000	503,000	1,027,000
Annual benefits:			
Flood damages prevented.....			1,897,000
Increased land use.....			1,772,000
Total.....			3,669,000



*Benefit-cost ratio.*—3.6.

*Local cooperation.*—Local interests are required to contribute 19.2 percent of contract price plus supervision and administration, presently estimated at \$2,953,000, to be paid prior to start of work units; construct and maintain associated lateral drainage facilities; provide all lands, easements and rights-of-way; make all bridge, road, and utility relocations except railroad bridges and approaches; hold and save the United States free from damage; prevent encroachment on the channel; maintain and operate the completed works; and inform affected interests annually that the project will provide no protection from ocean surges.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: No objection.

State of Florida: Concurs in plan but objects to cost-sharing features, road relocation standards, and cost estimates of maintenance.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget notes that the Chief of Engineers, in his letter to the Department of the Interior, has stated his intention of coordinating with all interests concerned in undertaking the recently authorized investigation of means of supplementing existing water supplies to the Everglades National Park. The Bureau would, therefore, expect preconstruction planning of this project, if it is authorized, to be fully coordinated with this pending investigation in order that there will be adequate assurance before funds for construction are requested that the project will contribute to the achievement of maximum benefits to the region and the Nation from development of the water resources of the area.

The Bureau advises that there is no objection to submission of the report to Congress.

#### INTERIM REPORT ON CUTLER DRAIN AREA, FLORIDA CENTRAL AND SOUTHERN FLORIDA PROJECT

(S. Doc. 123, 87th Cong.)

*Location.*—Cutler drain area comprising about 38 square miles in Dade County is located immediately south of Miami on the Atlantic coast of Florida.

*Authority.*—Senate Public Works Committee resolution, adopted November 15, 1954 (partial response).

*Existing project.*—There are no Federal improvements within the Cutler drain area. However, the area is encompassed by works of the central and southern Florida project.

*Flood problem.*—There is a need for flood control and drainage in the Cutler drain area which has experienced eight damaging floods since 1946.

*Recommended plan of improvement.*—The plan of improvement provides for improvement of the Cutler drain area for flood control and major drainage including a connecting canal to Snapper Creek Canal to permit diversion of fresh-water supply from the north.

*Estimated cost (price level April 1961).—*

Federal.....	\$2, 063, 000
Non-Federal.....	2, 104, 000
Total.....	4, 167, 000

*Project economics (price level, April 1961).—*

	Federal	Non-Federal	Total
Annual charges:			
Primary works:			
Interest and amortization.....	\$75, 800	\$75, 900	\$151, 700
Maintenance and operation.....		30, 300	30, 300
Loss in productivity of land (economic cost).....			35, 000
Total primary cost.....	75, 800	106, 200	217, 000
Associated work.....		17, 000	17, 000
Total.....	75, 800	123, 200	234, 000
Annual benefits:			
Flood damages prevented.....			333, 000
Increased land use.....			1, 017, 000
Total.....			1, 350, 000

*Benefit-cost ratio.—5.8.*

*Local cooperation.*—Local interests are required to construct and maintain associated lateral drainage facilities; provide all lands, easements, and rights-of-way; make all bridge, road, and utility relocations except railroad bridges and approaches; hold and save the United States free from damage; prevent encroachment on the channel; and maintain and operate the completed works.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Health, Education, and Welfare, Public Health Service: No objection.

State of Florida: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## FOUR RIVERS BASINS, FLA.

*Location.*—The Four River Basins in this report consist of the drainage areas of four main streams in central and southwest peninsular Florida which rise at or within the Green Swamp region and certain intervening streams on the west coast of Florida. The four rivers are the Hillsborough, Oklawaha, Withlacoochee, and Peace Rivers. The city of Tampa is located on Hillsborough River.

*Authority.*—Nine resolutions of the Senate and House Public Works Committees and two items in acts of Congress.

*Existing project.*—There are several authorized navigation improvements including the cross-Florida barge canal, which will provide navigable channels in the lower reaches of the Withlacoochee and Oklawaha Rivers; the Pitblachascotee River from the Gulf of Mexico to Port Richey, Tampa Harbor; the Oklawaha River to Moss Bluff Dam; Withlacoochee River; Peace River and Anclote River. There are no flood control projects in the area.

*Flood problem.*—There is a water problem because of flooding and poor drainage during wet seasons and a lack of water during dry seasons to adequately meet demands for agricultural and domestic use. Salt water enters Lake Tarpon from underground and, when the lake rises, damages surrounding land.

*Recommended plan of improvement.*—The plan of improvement provides for improvements of southwest Florida, drained by the Hillsborough, Oklawaha, Withlacoochee, Peace, Anclote, and Pithlachascotee Rivers, and Lake Tarpon for flood control, major drainage, and other purposes.

*Estimated cost (price level of October 1961).*—

Federal.....	\$57, 760, 000
Non-Federal.....	42, 020, 000
Total.....	99, 780, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Primary work:			
Interest and amortization.....	\$2, 201, 000	\$1, 475, 000	\$3, 676, 000
Maintenance and operation.....		328, 000	328, 000
Loss of land productivity (economic cost).....			601, 000
Total primary work.....	2, 201, 000	1, 803, 000	4, 605, 000
Associated work.....		241, 500	241, 500
Total.....	2, 201, 000	2, 044, 500	4, 846, 500
Annual benefits:			
Flood damages prevented.....			2, 906, 000
Increased land use.....			3, 383, 000
Fish and wildlife conservation.....			528, 000
Navigation.....			134, 000
Recreation.....			87, 000
Total.....			7, 038, 000

*Benefit-cost ratio.*—1.5.

*Local cooperation.*—Local interests are required to contribute 17 percent of the contract price plus supervision and administration presently estimated at \$10,700,000; construct and maintain associated lateral drainage facilities; provide all lands, easements, and rights-of-way; make all bridge, road, and utility relocations except railroad bridges and approaches; hold and save the United States free from damage; preserve outlet waterways needed for the proposed work; and maintain and operate the completed works. The Southwest Florida Water Management District would assume responsibility for local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: No objection.

Department of Health, Education, and Welfare: No objection.

State of Florida: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget suggests that further consideration be given to the matter of a local cash contribution toward the cost of the project for benefits to recreational boating. The Bureau recommends that the cost allocated to fish



and wildlife enhancement features in projects of this kind be divided equally between the Federal Government and local interests.

*Remarks.*—The committee has made the appropriate changes to reflect the Budget views.

CHUNKY CREEK, CHICKASAWHAY AND PASCAGOULA RIVERS, MISS.

(H. Doc. 549, 87th Cong.)

*Location.*—The Pascagoula River drains most of southeast Mississippi and a small part of southwest Alabama, covering an area of 9,700 square miles. It discharges into the Gulf of Mexico at Pascagoula, Miss.

*Authority.*—This report is in full response to section 11 of the Flood Control Act adopted July 24, 1946, and to the House Committee on Public Works resolution adopted June 26, 1952.

*Existing project.*—Sowashee Creek channel at Meridian, Miss., was improved for flood control in 1955 under general congressional authority for construction of small flood control projects, at a Federal cost of \$142,600.

*Flood problem.*—Okatibbee and Chunky Creeks join to form the Chickasawhay River which flows 164 miles to join the Leaf River and form the Pascagoula River. There is a serious flood problem along Okatibbee Creek for 37 miles above its mouth and along the 18-mile upstream reach of the Chickasawhay River. The total flood plain covers 27,000 acres, of which 650 acres are urban.

*Recommended plan of improvement.*—A reservoir, located 38 miles above the mouth of Okatibbee Creek and 7 miles northwest of Meridian, for flood control, recreation (both general and fish and wildlife), and municipal and industrial water supply. Gross storage would be 109,800 acre-feet, with 80,600 acre-feet for flood control, 8,500 acre-feet for water supply and recreation, and the balance for sediment accumulation. The flood control storage would provide partial protection as far as 18 miles downstream along the Chickasawhay River. The water supply storage would provide a dependable yield of 25 million gallons daily. Basic facilities for public access and use of the project area would be provided.

*Estimated cost (price level of 1961).*—Federal, \$6,740,000.<sup>1</sup>

*Project economics.*—

Annual charges (Federal):

Interest and amortization.....	\$210, 000
Maintenance and operation.....	60, 000
Total.....	<u>270, 000</u>

Annual benefits:

Flood control.....	159, 000
General recreation.....	125, 000
Fish and wildlife recreation.....	60, 000
Municipal and industrial water supply.....	50, 000
Total.....	<u>394, 000</u>

<sup>1</sup> Includes construction costs allocated to water supply of \$1 million to be reimbursed in accordance with the Water Supply Act of 1958.

*Benefit-cost ratio.*—1.5.

*Local cooperation.*—Furnish, prior to construction, assurances satisfactory to the Secretary of the Army that they will hold and save the United States free from damages from water-rights claims resulting from construction and operation of the project; prevent encroachment and obstruction of downstream channels which would adversely affect operation of the project; and pay the United States, in accordance with the Water Supply Act of 1958 as amended, the entire amount of the construction costs allocated to water supply, presently estimated at \$1 million, and the entire amount of operation, maintenance, and replacement costs allocated to water supply, presently estimated at \$3,000 annually, the final amounts to be determined after actual costs are known. The city of Meridian has assured that they will cooperate in the development of plans, and, upon approval of construction by Congress or when plans are completed, will make a firm determination of the extent the city could participate in the project.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Mississippi: Favorable.

*Comments of the Bureau of the Budget.*—No objection. However, the Bureau would expect that prior to any request for funds to initiate construction of the project, it would be reevaluated in the light of the administration's standards and policies, pertaining to recreation, applicable at that time.

#### GIN BAYOU YAZOO RIVER, MISS.

Gin Bayou drains an area of about 2 square miles before it traverses the campus of the Mississippi Vocational College. It is a tributary of Muddy Bayou which in turn is a tributary of Quiver River.

Gin and Muddy Bayous have inadequate channel capacities due to obstructions caused by vegetation. In addition, road crossings have inadequate culverts resulting in severe flooding of the campus of the Mississippi Vocational College during periods of heavy rainfall.

In view of the severe damages suffered by the Mississippi Vocational College the committee has seen fit to include language in the bill authorizing a project which is designed to alleviate the present flood and drainage problem.

#### MISSISSIPPI RIVER DELTA AT AND BELOW NEW ORLEANS, LA.

(H. Doc. 550, 87th Cong.)

*Location.*—The study area covered in this report is in the coastal region of Louisiana. It includes the lands subject to inundation by hurricane tides extending on both banks of the Mississippi River from the vicinity of New Orleans to the Gulf of Mexico and from the south shore of Lake Borgne and Chandeleur Sound to Barataria Bay.

*Authority.*—Public Law 71, 84th Congress, 1st session, June 15, 1955.

*Existing project.*—The main river levees which are part of the Federal project "Flood control, Mississippi River and tributaries," range in elevation on the east bank from 24 feet mean sea level at New Orleans to 14 feet at Bohemia, La., and on the west bank from 24 feet opposite New Orleans to 9 feet at Venice, La. These levees have not been overtopped from the river side by hurricane tides since they were constructed to present grades.

*Flood problem.*—During the period of recorded history of Louisiana, 151 known hurricanes or tropical storms have struck or threatened the State. There have been 12 hurricanes which caused major damages and 10 hurricanes or tropical storms causing minor damages within the study area since 1893.

*Recommended plan of improvement.*—Prevention of hurricane tidal damages by increasing the heights of the existing back levees and modifying the existing drainage facilities where necessary in four separate reaches consisting of: the west bank for about 15 miles between cities Price and Empire (design grade 13.5); the west bank for about 21 miles between Empire and Venice and with such modifications of the main levee as may be required (design grade 13.5); the east bank for about 16 miles between Phoenix and Bohemia (design grades 13 and 14); and the east bank for about 8 miles between Violet and Verret (design grade 12).

*Estimated cost.*—

Federal.....	\$7,502,000
Non-Federal.....	3,216,000
Total.....	10,718,000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$226,200	\$124,500	\$350,700
Maintenance, operation, and major replacements.....		5,500	5,500
Economic loss on lands.....		5,400	5,400
Total.....	226,200	135,400	361,600
Annual benefits: Damages prevented.....			801,000

*Benefit-cost ratio.*—2.2.

*Local cooperation.*—(a) Provide all lands, easements, and rights-of-way, including borrow areas and spoil disposal areas necessary for the construction of the project, at costs presently estimated at \$772,000; (b) accomplish all necessary alterations and relocations to roads, pipelines, cables, wharves, and other facilities required by the construction of the project, at costs presently estimated at \$600,000; (c) bear 30 percent of the first cost, a sum presently estimated at \$3,216,000; to consist of the items listed in subparagraphs (a) and (b) above and a cash contribution presently estimated at \$1,844,000, to be paid either in a lump sum prior to initiation of construction or in installments prior to start of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, or, as a substitute for



any part of the cash contribution, accomplish in accordance with approved construction schedules items of work of equivalent value as determined by the Chief of Engineers, the final apportionment of costs to be made after actual costs and values have been determined; (d) hold and save the United States free from damages due to the construction works; (e) maintain and operate all works after completion in accordance with regulations prescribed by the Secretary of the Army; (f) prevent any encroachment on ponding areas unless substitute storage capacity or equivalent pumping is provided promptly; and (g) at least annually, notify those affected that the project will not provide complete protection from tidal flooding and that further local actions must be taken during hurricane emergencies.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Commerce: Favorable.

State of Louisiana: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### RED RIVER IN NATCHITOCHES AND RED RIVER PARISHES, LA.

(H. Doc. 476, 87th Cong.)

*Location.*—The three projects considered are located on the Red River in central Louisiana in the vicinity of the town of Natchitoches. The areas concerned are primarily agricultural.

*Authority.*—Senate Public Works Committee resolutions dated March 11, 1957, and June 20, 1957; House Public Works Committee resolution dated April 21, 1950; and House Committee on Rivers and Harbors resolution dated February 25, 1938, (partial response).

*Existing project.*—Denison Dam on Red River at mile 734; Red River below Denison Dam in Arkansas, Oklahoma, Texas, and Louisiana, which provides for construction of reservoirs; Bayou Pierre, La., which provides for improvement of its lower 30 miles; East Point, La., which provides for construction of flood protection works in Loggy Bayou to the Coushatta Bayou area; and the Overton-Red River Waterway, La., which provides for construction of a channel 206 miles long and 9 feet deep to extend from Mississippi River mile 301 to Shreveport, La.

*Flood problem.*—Three small agricultural areas have been subjected to flooding from the Red River, Red River backwater, and local runoff. The areas considered for protection were: Bayou Nicholas and Coushatta, Lake End to mouth of Bayou Pierre, and the Campti-Clarence area.

*Recommended plan of improvement: Bayou Nicholas Basin and Coushatta.*—Construct a ring levee system with one section extending from the bluff north of Highway 84 across Bayou Nicholas to the natural high Red River bank. A second segment would run from the high bank a short distance downstream to tie into the embankment of the Kansas City Southern Railway. A culvert would provide for local drainage. *Campti-Clarence area.*—A ring levee extending from Campti along Red River to Saline Bayou, thence along the west bank of the Bayou to Chivery Dam, thence westward to the hill line southwest of Clear Lake. A saddle dike would be required about 4 miles east of Campti. The levee would be about 32 miles long and average

7.5 feet in height. Seven gated pipe culverts and landside ditches would be required for interior drainage, in addition to clearing and snagging of about 11 miles of Bourbeaux Bayou, closure of Bourbeaux Bayou near Chivery Dam, and enlargement of 5 miles of Chevreuille Bayou to provide a new outlet for Bourbeaux Bayou.

*Estimated cost (price level of April 1960).—*

	Bayou Nicholas	Campti-Clarence
Federal.....	\$55,000	\$1,293,000
Non-Federal.....	6,000	220,000
Total.....	61,000	1,513,000

*Project Economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Campti-Clarence area:			
Interest and amortization.....	\$40,477	\$19,225	\$59,702
Operation and maintenance.....		7,080	7,080
Replacements.....	3,434	882	4,316
Economic loss of land.....		1,430	1,430
Drainage.....	764	5,942	6,706
Total.....	44,675	34,559	79,234
Bayou Nicholas Basin and Coushatta:			
Interest and amortization.....	1,988	279	2,267
Economic loss of land.....		43	43
Operation and maintenance.....		190	190
Total.....	1,988	512	2,500
Annual benefits:			
Campti-Clarence area:			
Flood damage prevented.....			61,400
Land enhancement.....			35,700
Total.....			97,100
Bayou Nicholas Basin and Coushatta: Flood damages prevented.....			2,700

*Benefit-cost ratio.*—Nicholas Basin and Coushatta, 1.1; Campti-Clarence, 1.2.

*Local cooperation.*—Furnish lands, easements, and rights-of-way; make necessary relocations; maintain and operate; hold and save United States free from damages; prevent encroachment on improved channels; and organize drainage district.

*Comments of States and Federal agencies.*—

State of Louisiana: Favorable.

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—Subsequent to transmission of the report to Congress, the Chief of Engineers approved a flood protection project for Bayou Nicholas (Coushatta, La.), under the special small project program authorized by section 205 of the 1948 Flood Control Act as amended by Public Law 685, 84th Congress. Accordingly, no additional authorization is required for construction of this project.

## LOWER MISSISSIPPI RIVER BASIN—WILL M. WHITTINGTON AUXILIARY CHANNEL

The committee has included language in the bill authorizing the change in name of the lower auxiliary channel in honor of the late Representative Will M. Whittington, a Member of Congress from the Third District of Mississippi, and former chairman of the House Committee on Public Works.

The lower auxiliary channel is a major feature of the Yazoo Basin project in Mississippi and provides for diversion of a large portion of the flow of the Yazoo River. It leaves the river at mile 45 and reenters at mile 109. It is 32 miles in length and costs approximately \$11 million. It is fitting that a project of this magnitude be named in honor of the distinguished gentleman from Mississippi.

Judge Whittington's colleagues considered him to be "the father of flood control." Perusal of the flood control bills enacted during his congressional career and the legislative history that relates to them will show that there is ample basis for this designation.

In introducing the 1950 flood control bill on the floor of the House of Representatives Judge Whittington had this to say:

You will pardon me for saying this, but I have had something to do with the writing of every flood-control bill on the statute books. I am not a young man any longer. My eyes are toward the setting sun. I want to provide for the protection of the people in the State where I live, but I will never ask my Government or your Government to provide for the district that I live in unless comparable relief is extended to every other congressional district in the United States.

These words of the beloved Judge Whittington echo the sentiments of the Committee on Public Works, whose duty and responsibility is to serve the needs of the Nation in the field of water resource development.

## VINCE AND LITTLE VINCE BAYOUS, TEX.

(H. Doc. 441, 87th Cong.)

*Location.*—The watershed of Vince Bayou and its tributary, Little Vince Bayou, lies in Harris County, Tex., at and in the vicinity of Houston.

*Authority.*—Resolution, House Public Works Committee, adopted July 1, 1958.

*Existing project.*—There are no Federal improvements for flood control in the Vince Bayou watershed.

*Flood problem.*—Floods in this densely urbanized area are caused by thunderstorms, general storms, and torrential rainfall associated with hurricanes and other tropical disturbances. At least six major floods have occurred since 1928. Average annual damages are estimated at \$253,000.

*Recommended improvements.*—Channel improvement of Vince Bayou from the mouth (at Houston ship channel) upstream about 7.3 miles, and of Little Vince Bayou from the mouth upstream about 4.2 miles. Improved channels would have bottom widths of 10 and 15 feet in concrete-lined sections and 20 to 50 feet in unlined, earth sections.



*Estimated cost (January 1961 prices).—*

Federal.....	\$2, 224, 000
Non-Federal.....	1, 956, 000
<b>Total.....</b>	<b>4, 180, 000</b>

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$83, 300	\$90, 000	\$173, 300
Maintenance and operation.....	0	27, 000	27, 000
<b>Total.....</b>	<b>83, 300</b>	<b>117, 000</b>	<b>200, 300</b>
Annual benefits: Flood damage prevention.....			237, 000

*Benefit-cost ratio.—1.2.*

*Local cooperation.*—Furnish lands, easements, rights-of-way, and spoil disposal areas; bear costs of all necessary alterations and relocations of utilities except railroad bridges; hold and save the United States free from damages; maintain and operate the project; prohibit encroachments on flood-carrying capacity of channels. Local interests agree.

*Comments of States and Federal agencies.—*

State of Texas: Favorable.

Department of Interior: Favorable.

Department of Agriculture: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

## HURRICANE SURVEY OF PORT ARTHUR AND VICINITY, TEXAS

(H. Doc. 505, 87th Cong.)

*Location.*—Port Arthur is located on the west shore of Lake Sabine in the extreme southeast corner of Texas, about 14 miles from the Gulf of Mexico.

*Authority.*—Public Law 71, 84th Congress, approved June 15, 1955.

*Existing project.*—There are no existing Federal projects for hurricane protection in the Port Arthur area. Local interests have constructed a system of earth levees and seawalls for storm tide protection for the older portions of the developed area.

*Flood problem.*—Occurrence of a severe hurricane in the vicinity of Port Arthur would overtop the existing improvements and cause extensive damages to residential and industrial property. Also considerable development has occurred in the low coastal lands outside the existing protection system.

*Recommended plan of improvement.*—Provides for enlarging, strengthening, and extending the existing levees and seawall to protect with a single enclosure about 37,000 acres of Port Arthur, Groves, Lakeview, Pear Ridge, and Griffing Park and intervening areas. Two separate industrial areas south of Taylors Bayou would be protected by ring levees. Additional pumping capacity for interior drainage would be provided.

*Estimated cost (price level of September 1961).—*

Federal.....	\$23, 380, 000
Non-Federal.....	10, 020, 000
Total.....	33, 400, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$710, 000	\$340, 000	\$1, 050, 000
Maintenance and operation.....		100, 000	100, 000
Total.....	710, 000	440, 000	1, 150, 000
Annual benefits:			
Damages prevented.....			6, 388, 000
Land enhancement.....			122, 000
Total.....			6, 510, 000

*Benefit-cost ratio.—5.7.*

*Local cooperation.*—Furnish all lands, easements, and rights-of-way, including borrow areas; make alterations and relocations of buildings, pipelines and utilities; bear 30 percent of the total project cost to include the above items and a cash contribution presently estimated at \$9,330,000, the final apportionment of cost to be made after actual costs and values have been determined; hold and save the United States free from damages; maintain and operate all works; and prevent encroachment on the ponding areas that would reduce the capacity unless such is offset by additional pumping capacity. Local interests have indicated their willingness and ability to meet these requirements.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

State of Texas: Favorable.

*Comment of the Bureau of the Budget.*—No objection.

## HURRICANE SURVEY OF FREEPORT AND VICINITY, TEXAS

(H. Doc. 495, 87th Cong.)

*Location.*—Freeport, Tex., is located at the mouth of the Brazos River about 43 miles southwest of Galveston.

*Authority.*—Public Law 71, 84th Congress, approved June 15, 1955.

*Existing project.*—There is no Federal flood or hurricane protection project at Freeport. Local interests have constructed a system of levees to protect the area between the Brazos River and Oyster Creek from ocean surges. Also the Freeport Harbor project provides for diversion of the Brazos River to the Gulf of Mexico southwest of the original river mouth, a dam at the point of diversion together with a levee along the diversion channel, and a deep-draft channel in the old river together with jetties at the entrance and turning basins in the harbor.

*Flood problem.*—Occurrence of severe storm tides in excess of 10 feet can overtop the existing protection system at low points with subsequent inundation of large residential and industrial areas.

*Recommended plan of improvement.*—Raising and enlarging about 40 miles of existing levee and the construction of nearly 5 miles of levee along Oyster Creek to extend the existing levee to high ground near Lake Barbara together with the necessary extension of existing drainage structures and road ramps. Also, the construction of two pumping plants for disposal of interior runoff.

*Estimated cost (price level of August 1961).*—

Federal.....	\$3, 780, 000
Non-Federal.....	1, 620, 000
<b>Total.....</b>	<b>5, 400, 000</b>

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$140, 000	\$63, 000	\$203, 000
Maintenance and operation.....		30, 000	30, 000
<b>Total.....</b>	<b>140, 000</b>	<b>93, 000</b>	<b>233, 000</b>
<b>Annual benefits: Damages prevented.....</b>			<b>967, 000</b>

*Benefit-cost ratio.*—4.2.

*Local cooperation.*—Furnish all lands, easements, and rights-of-way, including borrow areas; make alterations and relocations of buildings, utilities, and other structures; bear 30 percent of the total project cost, to include the above items and a cash contribution presently estimated at \$1,545,000, the final apportionment of cost to be made after actual costs and values have been determined; hold and save the United States free from damages; maintain and operate after completion; and prevent encroachment on the ponding areas unless such is offset by additional pumping capacity. Local interests have indicated their willingness and ability to meet these requirements.

*Comments of State and Federal agencies.*—

State of Texas: Favorable.

Department of Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### EAST FORK OF TRINITY RIVER, TEX.

(H. Doc. 554, 87th Cong.)

*Location.*—The East Fork basin of the Trinity River lies a few miles east of Dallas, Tex.

*Authority.*—Resolution of the Committee on Public Works, House of Representatives, adopted May 15, 1957.

*Existing project.*—Lavon Dam and Reservoir at river mile 55.9, for flood control and water supply storage, is the only Corps of Engineers project in the watershed. The SCS has completed about 100 deten-



tion reservoirs in the basin and local interests have constructed some levees downstream from Lavon Dam.

*Flood problem.*—Channel capacity of the river below Lavon Dam diminishes to about 500 cubic feet per second in the lower 10-mile reach, which is insufficient for uncontrolled runoff below Lavon Dam.

*Recommended plan of improvement.*—Enlargement of Lavon Reservoir to provide an additional 262,300 acre-feet of municipal and industrial water supply storage and channel enlargement and raising and straightening existing levees below the proposed Forney Dam site (to be built by city of Dallas) at mile 31.8 to the mouth.

*Estimated cost (price level of July 1961).—*

	Reservoir enlargement	Channel and levee improvement	Total
Federal.....	\$16,700,000	\$7,060,000	\$23,760,000
Non-Federal.....		380,000	380,000
Total.....	16,700,000	7,440,000	24,140,000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Reservoir enlargement:			
Interest and amortization.....	\$630,300		\$630,300
Maintenance and operation.....	8,200		8,200
Total.....	638,500		638,500
Levee and channel:			
Interest and amortization.....	255,800	\$14,800	270,600
Maintenance and operation.....		20,000	20,000
Total.....	255,800	34,800	290,600
Annual benefits:			
Reservoir enlargement:			
Water supply.....			1,005,000
Recreation.....			300,000
Total.....			1,305,000
Levee and channel: Damages prevented.....			386,400

*Benefit-cost ratio.*—Reservoir enlargement, 2.0; channel and levee, 1.3.

*Local cooperation.*—(a) Reservoir enlargement: Make demands for use of water supply storage so that allocated costs will be repaid within project life, such costs presently estimated at 85.1 percent of the total construction cost, amounting to \$14,215,000, and 80.5 percent of the additional annual maintenance, operation and major replacement costs, amounting to \$6,600, with such modification in these amounts as may be necessary to reflect adjustments in the storage capacity for water supply and other purposes; hold and save the United States free from all water rights claims. (b) Levee and channel: Furnish all lands, easements, and rights-of-way; hold and save the United States free from damages; make all relocations and alterations to highways, highway bridges (except underpinning), utilities, buildings, pipelines, interior drainage facilities, and other structures (except railroad bridges and approaches); prevent encroachment on

the improved channels and floodway; and maintain and operate. Local interests have indicated they are willing and able to meet these conditions.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Texas: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

FORT WORTH FLOODWAY, TEXAS

(H. Doc. 454, 87th Cong.)

*Location.*—On Clear Fork of Trinity River, a tributary to the West Fork in and near the city of Fort Worth.

*Authority.*—Resolution, House Public Works Committee, adopted June 27, 1957.

*Existing projects.*—Benbrook Reservoir on Clear Fork for flood control and water supply constructed by corps; existing Fort Worth floodway extending 13 miles along West Fork and 1.6 miles on Clear Fork; authorized 6.5 miles extension of existing floodway on West Fork. The Soil Conservation Service has completed and planned numerous small reservoirs in the headwaters reaches.

*Flood problem.*—Existing property values in the Clear Fork flood plain are in excess of \$32 million. May 1949 flood was largest of record. Reoccurrence would cause damages estimated at \$4,300,000. Last major flood occurred in 1957. Average annual damages under existing conditions, \$375,000.

*Recommended improvements.*—Extend existing floodway upstream on Clear Fork a distance of about 6.5 miles; provide levee protection in two areas.

*Estimated cost (January 1960 prices).—*

Federal.....	\$5, 148, 000
Non-Federal.....	2, 878, 000
Total.....	8, 026, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$193, 800	\$149, 000	\$342, 800
Maintenance and operation.....	0	59, 900	59, 900
Total.....	193, 800	208, 900	402, 700
Annual benefits: Flood damage prevention.....			886, 000

*Benefit-cost ratio.—*2.2.

*Local cooperation.*—Furnish lands, easements, rights-of-way, and spoil disposal areas; bear costs of all necessary alterations and relocations of utilities except railroad bridges; hold and save the United States free from damages; maintain and operate the project; prohibit

encroachments on flood-carrying capacity of the channel. Local interests agree.

*Comments of States and Federal agencies.*—

State of Texas: Favorable.

Department of Interior: Favorable.

Department of Health, Education, and Welfare: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### SAN GABRIEL RIVER WATERSHED, TEXAS

(H. Doc. —, 87th Cong.)

*Location.*—The San Gabriel River watershed is in east-central Texas immediately north of Austin. The river, formed by the confluence of the North Fork and South Fork at Georgetown, Tex., flows eastward about 62 miles to its junction with Little River, a tributary of Brazos River.

*Authority.*—Resolution of the House Committee on Public Works, adopted July 29, 1955.

*Existing project.*—The authorized, but unconstructed, Laneport Dam and Reservoir at mile 29.7 on San Gabriel River is one of eight such projects in the Brazos River Basin planned to operate as a system for flood control and other water-related purposes. Pertinent data relative to the other seven reservoirs are given in the following tabulation:

Project	Stream	Status
Whitney.....	Brazos River.....	In operation.
Belton.....	Leon River.....	Do.
Waco.....	Bosque River.....	Under construction.
Proctor.....	Leon River.....	Do.
Stillhouse Hollow.....	Lampasas River.....	Planning underway.
Ferguson.....	Navasota River.....	Not started.
Somerville.....	Yegua Creek.....	Planning underway.

*Problems.*—Floods occur on the San Gabriel River at any time of the year and contribute substantially to flooding in the lower Brazos River. During the 48-year period, 1903 to 1950, inclusive, 25 floods occurred. The parts of the Little River and Brazos River flood plains affected by floodflows from San Gabriel River consist of about 1,080,000 acres, of which 598,000 are improved agricultural lands, 480,000 acres are unimproved grazing lands, and 2,552 acres are in several communities along the reach. The value of property in these reaches, based on July 1961 prices, is estimated at over \$350 million. Average annual damages in the reaches, assuming none of the eight authorized projects in operation, are estimated at \$9,703,300. Construction and operation of the eight authorized reservoirs would prevent average annual damages estimated at \$4,117,000.

In connection with the studies for this report, the U.S. Public Health Service prepared a report on the alternative cost of conservation storage and on the existing and future needs of municipal and industrial water supply in the area which could be served by storage in the San Gabriel River watershed. The service area extends from the vicinity of Waco to the Freeport-Velasco area, generally within the Brazos River Basin. The report shows that the usage in the service



area in 1958 was about 228 million gallons per day and that the needs in the year 2010, exclusive of return flow for reusage, is estimated at 1,102 million gallons per day. In comparison, the report shows the estimated yield from existing and proposed sources (exclusive of the reservoirs being covered in this report) to meet the need in the year 2010 as 603 million gallons per day, including 117 million gallons per day from ground water.

*Recommended plan of improvement.*—The plan of improvement consists of the authorized Laneport Reservoir, which would be modified under existing authority and applicable laws and policies, together with the addition of two recommended upstream reservoirs to be operated in conjunction with Laneport, all to serve the primary purposes of flood control, water supply, fish and wildlife, and recreation. The recommendations of the Chief of Engineers permit discretion regarding the sequence of construction of the authorized Laneport Reservoir and the recommended North Fork and South Fork Reservoirs. Under the plan, the first cost of Laneport Reservoir would be \$25,200,000 compared to a cost of \$28,700,000 as now estimated, such decrease being the result of certain economies in design and construction now proposed. Also, since local interests would be required to reimburse the United States for project costs allocated to water supply, currently estimated at \$10,185,000, the net cost to the United States for Laneport Reservoir would be \$15,014,000, or \$13,165,200 less than now estimated.

*Estimated cost (price level of July 1961).*—

Cost	Reservoir		Total
	North Fork	South Fork	
Federal.....	\$12,600,000	\$7,650,000	\$20,250,000

*Project economics.*—

	Reservoir		Total
	North Fork	South Fork	
<b>Annual charges:</b>			
Interest and amortization.....	\$473,700	\$287,900	\$761,600
Operation, maintenance, and replacement.....	70,300	64,000	134,300
Total.....	544,000	351,900	895,900
<b>Annual benefits:</b>			
Flood control.....	582,500	274,300	856,800
Water supply.....	512,800	273,000	785,800
Fish and wildlife.....	19,300	19,000	38,300
Recreation.....	351,700	290,000	641,700
Total.....	1,466,300	856,300	2,322,600
Benefit-cost ratio.....	2.7	2.4	2.

*Local cooperation.*—Pay the United States in accordance with the Water Supply Act of 1958, as amended, the first costs and the annual operation, maintenance, and replacement costs allocated to municipal and industrial water supply storage, presently estimated at \$10,077,000

and \$62,500, respectively, for the ultimate development; and hold and save the United States free from all water-rights claims resulting from construction and operation of the projects.

*Comments of State and Federal agencies.*—

Department of Interior: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

Department of Agriculture: No comment.

State of Texas: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

CLEAR FORK OF BRAZOS RIVER, ABILENE AREA, TEXAS

(H. Doc. 506, 87th Cong.)

*Location.*—Elm Creek, together with several of its tributaries, courses through the city of Abilene, and joins the Clear Fork of the Brazos. Abilene is about 150 miles west of Fort Worth, in north-central Texas.

*Authority.*—Resolution, House Public Works Committee, adopted July 29, 1953.

*Existing project.*—None.

*Flood problem.*—Urban flood plain at Abilene is in excess of 7,300 acres with improvements valued at \$139 million. Average annual damages under existing conditions estimated at \$1,067,000.

*Recommended plan of improvement.*—The plan consists essentially of straightening and enlarging 36 miles of existing channel; paving 7.9 miles of the enlarged channel; clearing and snagging 5.4 miles of channel; construction 2.3 miles of diversion dike; constructing, replacing, or modifying 33 highway bridges, 5 railway bridges, 19 multiple-box culverts, and 7 low-water crossings.

*Estimated cost (price level of 1961).*—

Federal.....	\$31, 200, 000
Non-Federal.....	7, 400, 000
Total.....	38, 600, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$946, 500	\$371, 100	\$1, 317, 600
Maintenance, operation, and replacement.....		52, 000	52, 000
Total.....	946, 500	423, 100	1, 369, 600
Annual benefits: Flood damage prevention.....			2, 218, 000

*Benefit-cost ratio.*—1.6.

*Local cooperation.*—Furnish lands, easements, rights-of-way and spoil disposal areas; bear costs of all necessary alterations and relocations of utilities except railroads; hold and save the United States free from damages; prohibit encroachments on improved channels; maintain and operate the project. Local interests agree.

*Comments of the State and Federal agencies.—*

State of Texas: Favorable.

Department of Interior: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

ALAMOGORDO, N. MEX.

(H. Doc. 473, 87th Cong.)

*Location.*—Alamogordo is located near the eastern edge of the Tularosa closed basin in south-central New Mexico about 85 miles north-east of El Paso, Tex.

*Authority.*—Section 206 of the Flood Control Act approved July 3, 1958.

*Existing project.*—No Federal flood control project in the basin. Local interests have constructed two separate channel and levee systems which are inadequate for overall protection.

*Flood problem.*—Thunderstorms over the canyons and arroyos, in the Sacramento Mountains, east of Alamogordo, generate high flows of short duration which spread over large sections of the city.

*Recommended plan of improvement.*—Provides for construction of about 6½ miles of diversion channel along the eastern city limits with a levee on the side toward the city, nearly 1 mile of channel improvement in Dilliard Draw north of the city, replacement of one railroad bridge, construction of three highway bridges, and with necessary alteration or modification at existing railroad and highway bridges.

*Estimated cost (price level of July 1961).—*

Federal.....	\$2, 040, 000
Non-Federal .....	450, 000
Total.....	2, 490, 000

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$59, 600	\$15, 800	\$75, 400
Maintenance and operation.....		5, 000	5, 000
Total.....	59, 600	20, 800	80, 400
<b>Annual benefits:</b>			
Damages prevented.....			101, 100
Land enhancement.....			7, 000
Total.....			108, 100

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Furnish all lands, easements, and rights-of-way; hold and save the United States free from damages; make alterations to existing improvements, other than railroads; prevent encroachment on the diversion channel; prevent encroachment in existing drainage channels within city; maintain and operate the works, except for the opening under the Holloman railroad spur. Local



interests indicated they are willing and able to comply with these requirements.

*Comments of the State and Federal agencies.—*

Department of Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of New Mexico: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

RIO GRANDE AND TRIBUTARIES, LAS CRUCES, N. MEX.

(S. Doc. 117, 87th Cong.)

*Location.*—Las Cruces is on the east side of the Rio Grande in south-central New Mexico about 45 miles northwest of El Paso, Tex.

*Authority.*—Resolution by the Senate Public Works Committee, adopted July 20, 1954.

*Existing project.*—No specific Federal flood-control project for Las Cruces. The existing Caballo Reservoir on the Rio Grande about 60 miles upstream, constructed by the Bureau of Reclamation and the channel and levee improvements on the mainstem of the Rio Grande constructed by the International Boundary and Water Commission, provide flood protection to agricultural land in Mesilla Valley including Las Cruces. Also, the Soil Conservation Service has constructed detention dams well upstream on arroyos entering Las Cruces.

*Flood problem.*—Storm runoff from the mountains east of Las Cruces debauches onto the valley where it spreads and is trapped by man-made obstructions and natural depressions particularly in Las Cruces, until it finds outlets over the highly developed valley floor.

*Recommended plan of improvement.*—One large detention reservoir about 3 miles long and 69 feet high with a capacity of 12,500 acre-feet near the eastern edge of the city together with an outlet channel to the Rio Grande, and a small detention dam with a capacity of nearly 170 acre-feet on Campus Arroyo to protect the university.

*Estimated cost (price level of July 1960).—*

Federal.....	\$3, 350, 000
Non-Federal.....	536, 000
Total.....	3, 886, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$123, 900	\$25, 700	\$149, 600
Maintenance and operation.....		8, 600	8, 600
Total.....	123, 900	34, 300	158, 200
Annual benefits:			
Damages prevented.....			215, 500
Land enhancement.....			7, 800
Total.....			223, 300

*Benefit-cost ratio.*—1.4.

*Local cooperation.*—Furnish all lands, easements, and rights-of-way; hold and save the United States free from damages; maintain and operate after completion, make alteration to existing improvements, except railroads; prevent encroachment upon the outlet channel from Las Cruces Dam to maintain a capacity of 275 cubic feet per second; prevent encroachment on the existing capacity of Campus Arroyo from Campus Dam to the sewerage disposal plant; and prevent encroachment, other than natural sediment deposit, on the reservoir storage capacity. Local interests have indicated their willingness and ability to meet these requirements.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Federal Power Commission: Favorable.

Public Health Service: Favorable.

International Boundary and Water Commission: Favorable.

State of New Mexico: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### CITY OF RUSSELLVILLE, ARK., SEWAGE TREATMENT FACILITIES

*Locations.*—The city of Russellville is located about 5 miles northeast of the Dardanelle lock and dam.

*Existing facilities.*—The city maintains and operates a primary sewage treatment plant northwest of the developed city area. The plant was constructed in 1951 and 1952 and is designed for an average daily flow of 1,590,000 gallons. Normally, the primary effluent flows by gravity outfall line into Prairie Creek west of the treatment plant. However, during times of high water it is necessary to pump the effluent. During dry seasons the only flow in Prairie Creek near its mouth is the primary sewage effluent which results in a nuisance and a health hazard. Prairie Creek empties into Illinois Bayou, a tributary of the Arkansas River. The treatment plant is overloaded and operational difficulties cause it to be out of service for extended periods. Because of these conditions the city, prior to the present time, has considered expansion of its present sewage collection system to handle present population needs more adequately.

*Existing flood conditions.*—The low area northwest of the city and bordering the city property are subject to frequent flooding from Illinois Bayou under natural conditions. Also, flooding in the downtown area caused by rapid runoff from the Prairie Creek watershed in an inadequate channel has resulted in extensive damages in the past. The flood of August 1957 occurred during low stages of the Illinois Bayou and therefore was a direct result of Prairie Creek runoff and caused damages estimated at \$140,000. With Dardanelle Dam in operation and reservoir level at 338 mean sea level (top of power pool), and without a protective dike, a portion of the city of Russellville (including a portion of the Arkansas Polytechnic College campus) would be permanently flooded.

*Position of the city.*—The city has requested a plan consisting of a lift station, pressure and outfall lines to divert the sewage to new treatment facilities to be constructed southeast of the city which would



empty into the Arkansas River below the Dardanelle Dam. The total estimated cost of these new facilities is \$1,803,913.

*Current status.*—Under plans investigated by the Corps of Engineers for protection of the city and disposal of storm water and sewage effluent, a dike is proposed near Illinois Bayou. The dike would be about 6,000 feet long with a maximum height of about 40 feet and crown elevation varying from 347.5 to 350.6 mean sea level. This dike would protect the low portions of the city and adjacent low areas from flooding due to the Dardanelle Reservoir. The dike would block the flow of Prairie Creek permanently and prevent storm water and sewage effluent from discharging by gravity flow into Illinois Bayou and the reservoir. Regardless of the method of disposal of the sewage plant effluent, discharge of storm water over the dike by pumping would be required. Various plans for disposing of the storm runoff and sewage effluent have been studied by the Corps of Engineers. Each plan requires a sump storage area for ponding storm runoff.

*Remarks.*—The committee is aware that a portion of the city of Russellville is to be protected from pool levels of Dardanelle Reservoir by a dike. The existing sewage facilities of the city of Russellville will be damaged by construction of the dike. The committee has included provisions in the bill providing a sewage outfall for the city of Russellville. It is believed that this is equitable.

#### COW CREEK, KANS.

(H. Doc. 531, 87th Cong.)

*Location.*—Cow Creek is located in central Kansas and it enters the Arkansas River near Hutchinson, Kans.

*Authority.*—Resolution of the House Committee on Public Works, adopted June 3, 1959.

*Existing project.*—No flood control project for Cow Creek. A local flood protection project at Hutchinson, Kans., provides for diversion of Cow Creek flood flows to the Arkansas River around the north side of the city.

*Flood problem.*—More than 30 miles of the channel are extremely crooked and obstructed by trees and brush. Flooding of agricultural lands starts when streamflows exceed 800 cubic feet per second. The flood plain area consists of about 24,600 acres of which more than 95 percent is under cultivation.

*Recommended plan of improvement.*—The plan consists of straightening, snagging, clearing, and deepening the existing channel, beginning at a point on Cow Creek about 2 miles upstream from the Kansas Highway No. 14 bridge and extending downstream about 33 miles to the diversion channel of the existing Hutchinson flood control project. Two dikes and two lateral ditches would be provided to intercept flows and divert them from Santa Fe Slough to Cow Creek. Where necessary outlet structures will be provided as well as alterations to highway bridges and one railroad bridge.



*Estimated cost (price level, January 1961).—*

Federal.....	\$1, 560, 000
Non-Federal.....	1, 058, 000
Total.....	2, 618, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$58, 000	\$41, 100	\$99, 100
Maintenance and operation.....		9, 800	9, 800
Total.....	58, 000	50, 900	108, 900
Annual benefits:			
Damages prevented.....			247, 000
Land enhancement.....			12, 000
Total.....			259, 000

*Benefit-cost ratio.—2.4.*

*Local cooperation.*—Furnish lands, easements, and rights-of-way; hold and save the United States free from damages; make alterations to highways, highway bridges, utilities, and related facilities, except railroad bridges; maintain and operate; prevent encroachment on the improved channel; inform individuals concerned, annually, that project will not protect against major floods. Local interests have indicated their willingness and ability to meet these requirements.

*Comments of the State and Federal agencies.—*

Department of the Interior: Commented concerning certain recommendations made by the Fish and Wildlife Service which were not adopted as part of the recommended plan.

Department of Commerce: Favorable.

State of Kansas: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## ARKANSAS RIVER, DODGE CITY, KANS.

(H. Doc. 498, 87th Cong.)

*Location.*—Dodge City is located on the Arkansas River in southwestern Kansas.

*Authority.*—Resolution of the House Committee on Flood Control, adopted July 2, 1943.

*Existing project.*—No Federal flood control project at Dodge City. Local interests have constructed low levees and some channel improvements.

*Flood problem.*—Flooding occurs when streamflows in the Arkansas River exceed the present channel capacity of about 7,000 cubic feet per second. Intense storm runoff in the basin below John Martin Dam, 188 miles upstream, presents a serious threat to the city.

*Recommended plan of improvement.*—The construction of 6.9 miles of levees and floodwalls with appurtenant bank protection together with 1.75 miles of channel enlargement on the Arkansas River; replacement of the existing railroad bridge; interior drainage facilities consisting of ditches, outlet structures, a storm sewer, and ponding

areas; and construction of a pumping plant to replace the existing sewerage treatment plant outlet.

*Estimated cost (price level, July 1961).—*

Federal.....	\$2, 133, 000
Non-Federal.....	323, 000
Total.....	2, 456, 000

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$77, 900	\$18, 000	\$95, 900
Maintenance and operation.....		5, 200	5, 200
Total.....	77, 900	23, 200	101, 100
<b>Annual benefits:</b>			
Damages prevented.....			163, 900
Land enhancement.....			5, 500
Total.....			169, 400

*Benefit-cost ratio.—1.7.*

*Local cooperation.—*Provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project, including easements required for flood-zoning purposes in the ponding areas; hold and save the United States free from damages due to the construction works and free from claims as a result of flooding from residual interior drainage during operation of the project; make any alterations to existing improvements other than the railroad, that may be required by the construction works, including the provision of a sewage pumping plant; maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; inform periodically all concerned, in a manner satisfactory to the Secretary of the Army, that some flooding will continue to occur because of temporary ponding; and prohibit encroachment on the capacities of the interior drains and ponding areas and the flood-carrying capacity of the improved river channel, and if ponding areas and capacities are impaired, provide promptly, without cost to the United States, substitute storage or equivalent pumping capacity. Local interests have indicated their willingness and ability to meet these requirements.

*Comments of the State and Federal agencies.—*

Department of Interior: Favorable.

Department of Commerce: Favorable.

Public Health Service: Favorable.

State of Kansas: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

#### VERDIGRIS RIVER AND TRIBUTARIES, OKLAHOMA AND KANSAS

(H. Doc. 563, 87th Cong.)

*Location.—*The Verdigris River Basin is in southeastern Kansas and northeastern Oklahoma. It has a drainage area of 8,300 square miles. The main stream rises near Emporia, Kans., and courses southward

about 350 miles to its confluence with the Arkansas River near Muskogee, Okla.

*Authority.*—Resolutions, Committee on Flood Control, House of Representatives, adopted April 23, 1942; Committee on Public Works, U.S. Senate, adopted May 25, 1960; also an item in the 1958 Flood Control Act.

*Existing projects.*—

Unit	Stream	Purpose	Status
Toronto Reservoir, Kans. ....	Verdigris River .....	Flood control conservation..	Completed.
Fall River Reservoir, Kans. ....	Fall River .....	do .....	Do.
Neodesha Reservoir, Kans. ....	Verdigris River .....	Flood control .....	Not started.
Elk City Reservoir, Kans. ....	Elk River .....	Flood control conservation..	Under construction.
Oologah Reservoir, Okla. ....	Verdigris River .....	(1) .....	Do.
Hulah Reservoir, Okla. ....	Caney River .....	Flood control conservation..	Completed.
Lock and dam 19, Oklahoma. ....	Verdigris River .....	Navigation .....	Not started.
Lock and dam 18, Oklahoma. ....	do .....	do .....	Do.
Lock and dam 17, Oklahoma. ....	do .....	do .....	Do.

<sup>1</sup> Flood control, power, navigation, and water supply.

*Problems.*—The Verdigris River is a major source of flooding along the Arkansas River in eastern Oklahoma and in Arkansas. During the 38-year period, 1922–60, 56 storms occurred over the Verdigris River Basin and 58 occurred over the Caney River-Bird Creek tributary basins. In addition, storms covering smaller areas have added to these occurrences along the tributaries to the extent that, even with the authorized reservoirs operating, flooding is expected to occur on the average of one or more times per year in the lower Caney River, the Verdigris River downstream from Caney River, and in the Bird Creek basin. The flood plains along these streams downstream from the existing and proposed damsites comprise 180,200 acres of rural lands, and 320 acres of urban lands in Oklahoma at Bartlesville, Avant, Skiatook, and the suburban area of Tulsa. Value of property in the flood plain is estimated at \$87 million in rural areas and \$30 million in urban areas; annual crop values are estimated at \$3.8 million. Average annual damages in the basin, excluding headwater areas, are estimated at \$4.8 million, of which about \$3 million would be prevented by the authorized reservoirs and the proposed Big Hill Reservoir, and about \$1.7 million of the remainder occurs in the study area. These damages are distributed as follows: \$437,000 along Caney River below Hulah Reservoir, \$408,000 along Verdigris River below Caney River, and \$861,000 in the Bird Creek basin. Because large supplies of ground water are lacking and existing sources are highly mineralized, attainment of supplies of suitable quantity and quality in the Verdigris River Basin is dependent upon surface sources in the tributary streams. The U.S. Public Health Service has made a study and prepared a report on the municipal and industrial water usage and future needs, as well as the pollution problem and water-quality control needs, in the lower Verdigris River Basin. The report indicates that the projected water supply needs in the lower Verdigris River Basin will far exceed the amount which can be provided from existing, authorized, and proposed reservoirs in the area. The report also indicates that, because oilfield operations have built up the chloride concentration of streams in the area, and because standard



treatment of domestic and industrial wastes cannot prevent degradation of the quality of receiving streams, storage for stream-quality control in amount equal to that provided for municipal and industrial water supply should be included in any reservoirs planned in the area.

*Recommended plan of improvement.*—Plan consists of five multiple-purpose reservoirs on tributaries to the Verdigris River, all for purposes of flood control, water supply, water quality control, recreation, and fish and wildlife, as follows: Copan on Caney Creek, Sand on Sand Creek, Skiatook on Hominy Creek, Birch on Birch Creek, Candy on Candy Creek.

*Estimated cost (1961 prices).*—

	Copan	Sand	Skiatook	Birch	Candy	Total
Federal.....	\$25, 578, 000	\$6, 117, 000	\$22, 875, 000	\$3, 245, 000	\$4, 585, 000	\$62, 400, 000
Non-Federal.....	(1)	(1)	(1)	(1)	(1)	(1)
Total.....	25, 578, 000	6, 117, 000	22, 875, 000	3, 245, 000	4, 585, 000	62, 400, 000

<sup>1</sup> Non-Federal interests to reimburse the United States for construction costs allocated to water supply, such amounts currently estimated as follows: Copan, \$688,000; Sand, \$1,570,000; Skiatook, \$4,278,000; Birch, \$428,000; Candy, \$590,000; total, \$7,554,000.

*Project economics.*—

Item	Reservoir					
	Copan	Sand	Skiatook	Birch	Candy	Total
Annual charges:						
Interest and amortization.....	\$767, 300	\$178, 800	\$682, 800	\$94, 500	\$133, 600	\$1, 857, 000
Operation, maintenance, and replacement.....	89, 700	55, 900	93, 200	40, 300	50, 900	330, 000
Total.....	857, 000	234, 700	776, 000	134, 800	184, 500	2, 187, 000
Annual benefits:						
Flood control.....	1, 279, 000	385, 000	861, 000	472, 000	357, 000	3, 354, 000
Conservation.....	66, 000	133, 000	424, 000	46, 000	63, 000	732, 000
Recreation.....	123, 000	81, 000	168, 000	41, 000	41, 000	454, 000
Fish and wildlife.....	66, 000	45, 000	77, 000	22, 000	23, 000	233, 000
Total.....	1, 534, 000	644, 000	1, 530, 000	581, 000	484, 000	4, 773, 000
Benefit-cost ratio.....	1.8	2.7	2.0	4.3	2.6	2.2

*Local cooperation.*—Bear all costs allocated to water supply in accordance with the Water Supply Act of 1958, as amended; hold and save the United States free from water rights claims.

*Comments of States and Federal agencies.*—

Department of the Interior: Recommend acquisition of additional lands for fish and wildlife purposes.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Oklahoma: Favorable.

State of Kansas: Favorable.

*Comments of the Bureau of the Budget.*—No objection to submission of the report to the Congress.

## KAW RESERVOIR, ARKANSAS RIVER, OKLA.

(S. Doc. 143, 78th Cong.)

*Location.*—Kaw Reservoir would be located on the main stem of the Arkansas River in north-central Oklahoma.

*Authority.*—Resolution, Senate Committee on Public Works, adopted February 21, 1958.

*Existing project.*—The water resources of the Arkansas River basin are being extensively developed for flood control, navigation, and other purposes. These developments lie generally downstream and east of the Kaw Dam site. The navigation project provides for a 9-foot channel up the Arkansas and Verdigris Rivers to the vicinity of Catoosa, Okla. The Keystone Reservoir, a major multiple-purpose project for flood control, navigation, and other purposes, is under construction about 115 miles downstream of the Kaw Dam site. The existing Great Salt Plains Reservoir, on the Salt Fork of Arkansas River, provides 292,000 acre-feet of storage for flood control, sediment reserve, recreation, and wildlife. This major tributary enters the Arkansas River about 16 miles downstream from the Kaw Dam site.

*Problems.*—The principal water-resource problems of the area are the need for control of floods and for increased dependable supplies of domestic and industrial water of good quality. At present the flood plain downstream of the Kaw Dam site is predominantly rural; however, it includes 130 acres of urban lands at Ponca City. It is anticipated that urban development in the flood plain will increase considerably, resulting in substantially greater urban flood damages. Floods have occurred about once a year in the vicinity of Ponca City and major floods occurred in 1923, 1926, 1944, 1945, 1951, and 1957. The maximum flood of record was that of June 1923 which had a peak discharge estimated at 165,000 cubic feet per second at the Kaw Dam site. A recurrence of a flood of this magnitude would cause damages of \$2,369,000 in the reach from the damsite to Keystone Reservoir. The total average annual flood damages in this reach under existing conditions are estimated at \$433,000.

*Recommended plan of improvement.*—Kaw Reservoir to provide storage for flood control, municipal and industrial water supply, water-quality control, and other conservation uses, including recreation and fish and wildlife enhancement.

*Estimated cost (price level of 1961).*—

Federal .....	\$83, 230, 000
Non-Federal .....	( <sup>1</sup> )
Total .....	83, 230, 000

<sup>1</sup> Local interests to reimburse the United States the entire construction cost allocated to water supply, currently estimated at \$13,500,000.

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$2, 133, 700	\$415, 000	\$2, 548, 700
Maintenance, operation, and replacements.....	152, 300	27, 000	179, 300
Total.....	2, 286, 000	442, 000	2, 728, 000
<b>Annual benefits:</b>			
Damages prevented.....			1, 128, 000
Increased land use.....			305, 000
Reduced sediment in Keystone Reservoir.....			80, 000
Conservation.....			1, 370, 000
Recreation.....			887, 000
Fish and wildlife.....			216, 000
Total.....			3, 986, 000

*Benefit-cost ratio.—1.5.*

*Local cooperation.*—Local interests would be required to reimburse the United States, in accordance with the Water Supply Act of 1958, as amended, for the costs allocated to municipal and industrial water supply and the annual operation and maintenance costs chargeable to water-supply storage. These costs are presently estimated to be in the magnitude of \$13,500,000 and \$27,000, respectively.

*Comments of the States and Federal agencies.—*

Department of Interior: Favorable.

Department of Commerce: Favorable.

Department of Agriculture: Comment that a net loss to agricultural production would result from project.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Oklahoma: Favorable.

State of Kansas: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget believes that pollution abatement measures are vital to the suitability of Arkansas River waters for projected uses, and, that there is uncertainty at this time of the extent of future needs for water supply and water quality control storage in the proposed Kaw Reservoir. Accordingly, the Bureau states that any request for funds to initiate construction of the project, if authorized by the Congress, should be accompanied by the results of a detailed review of the need and usefulness of storage for these purposes.

The Bureau of the Budget recommends that the decision on establishment of a national wildlife refuge in conjunction with the reservoir project be deferred until an adequate long-range plan for the refuge system is developed which will permit a meaningful evaluation of the contribution of the proposed refuge to the purposes of the National wildlife refuge system; means are developed for financing refuge land acquisitions related to water resources projects in a way which will assure the advantages of unified financing of the total refuge land acquisition program; and, there has been opportunity for further consideration of local views with respect to establishment of the refuge.

The Bureau of the Budget advises that, subject to consideration of its foregoing comments, there would be no objection to submission of the report to the Congress.



*Action by the Secretary of the Army.*—Concurs with the Bureau of the Budget.

VILLAGE CREEK, WHITE RIVER, AND MAYBERRY LEVEE DISTRICTS, RESTUDY  
OF PLAN III

(H. Doc. 577, 87th Cong.)

*Location.*—Along the left bank of the White River in northeast Arkansas.

*Authority.*—Flood Control Act of 1960 (Public Law 86-645).

*Existing project.*—The Flood Control Act of 1936 authorized construction of a number of local flood control improvements, consisting mainly of raising, enlarging, and connecting existing levees. The Flood Control Act of 1960 authorized improvements within the Village Creek, White River, and Mayberry Levee Districts to provide for clearing and snagging 14.7 miles of old channels and constructing 10.6 miles of new channels, together with certain facilities for mitigation of fish and wildlife losses, at an estimated Federal cost of \$294,000, subject to local cooperation. (The authorized plan is referred to as plan I).

*Flood problem.*—About 21,340 acres of wooded, cleared, and cultivated land are subject to flooding, ponding due to interior runoff, and poor drainage. Authorized plan I would benefit about 18,400 acres.

*Recommended plan of improvement.*—Construction of a pumping plant with a capacity of 300,000 gallons per minute at the Taylor Slough outlet, as an element of the authorized flood control and drainage plan.

*Estimated cost (price level of spring 1961).*—

Federal.....	<sup>1</sup> \$1, 018,000
Non-Federal.....	<sup>1</sup> 29, 000
Total.....	1, 047, 000

<sup>1</sup> Increase in cost over cost of authorized plan I.

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges: <sup>1</sup>			
Interest and amortization.....	\$36, 830	\$2, 630	\$39, 460
Maintenance and operation.....		16, 680	16, 680
Total.....	36, 830	19, 310	56, 140
Annual benefits: <sup>2</sup>			
Damages prevented.....			85, 100
Increased land use.....			59, 140
Total.....			144, 240

<sup>1</sup> Increase in cost over cost of authorized plan I.

<sup>2</sup> Increase in benefits over benefits of authorized plan I.

*Benefit-cost ratio.*—2.6.

*Local cooperation.*—Contribute in cash 17.2 percent of the Federal construction cost of the pumping plant, an amount currently estimated at \$211,000; provide lands, easements, and rights-of-way; effect necessary relocations; hold and save the United States free from dam-

ages; maintain and operate the project as prescribed and at their own expense, and other items as specified in authorized plan I.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture:

Department of Health, Education, and Welfare: Favorable.

State of Arkansas: Noted the requirement for a cash contribution of \$211,000 and believed it desirable to review again the requirements for a cash contribution.

*Comments of the Bureau of the Budget.*—No objection.

#### VILLAGE CREEK, JACKSON AND LAWRENCE COUNTIES, ARK.

(H. Doc. 352, 87th Cong.)

*Location.*—Village Creek rises in Randolph County in northeastern Arkansas and flows generally southwestward through Jackson and Lawrence Counties and joins the White River near Newport, about 80 miles northeast from Little Rock.

*Authority.*—Resolution of the Committee on Public Works, House of Representatives, adopted October 16, 1951.

*Existing improvements.*—No Federal projects specifically for flood control in Village Creek Basin. However, reservoir and levee projects in the nearby White River and Black River Basins provide some flood protection by preventing overflow into Village Creek Basin. Improvements by local interests consist of excavation of drainage ditches on tributaries and along the main stem of Village Creek.

*Flood problem.*—Frequent flooding of agricultural lands results in serious damages to crops. Flooding results from intense local storms of short duration and from general storms extending over longer periods. The flatland and stream slopes, inadequate channels, and large valley storage cause storm runoff to concentrate slowly in the main stem with prolonged flooding of large areas.

*Recommended plan of improvement.*—Channel enlargement, straightening and clearing on Village Creek, from the mouth upstream a total distance of 61 miles, together with adequate on-farm and group lateral drainage facilities.

*Estimated cost (price level of January 1960).*—

Federal.....	\$1, 968, 000
Non-Federal.....	2, 165, 000
Total.....	4, 133, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$72, 400	\$91, 300	\$163, 700
Maintenance, operation, and replacement.....		45, 300	45, 300
Loss of production.....		2, 300	2, 300
Total.....	72, 400	138, 900	211, 300
Annual benefits:			
Damages prevented.....			74, 300
Improved drainage.....			379, 900
Total.....			454, 200

*Benefit-cost ratio.*—2.1.

*Local cooperation.*—Contribute in cash 30.7 percent of the actual Federal construction cost, presently estimated at \$871,000; furnish all lands, easements, and rights-of-way; make alterations to existing improvements, except railroad facilities; hold and save the United States free from damages; prohibit encroachments on improved channel; construct and maintain on-farm and lateral drainage facilities; and maintain the improved creek channel. Local interests have indicated they are willing and able to comply with these requirements.

*Comments of State and Federal agencies.*—

Department of Agriculture: Favorable.

Department of the Interior: Commented that the recommended plan would result in an annual loss to fish and wildlife resources but proposed no specific plan for mitigating such losses.

Public Health Service: Favorable.

State of Arkansas: Concurred in the recommendation; however, noted that the local costs appeared to be excessive.

*Comments of the Bureau of the Budget.*—No objection.

## LAKE KEMP, WICHITA RIVER, TEX.

(S. Doc. 144, 87th Cong.)

*Location.*—Wichita River is a south bank tributary of the Red River in north-central Texas. Lake Kemp is located on the Wichita River about 70 miles upstream from the city of Wichita Falls.

*Authority.*—Resolution, Senate Committee on Public Works, adopted April 16, 1959.

*Existing project.*—There are no existing or authorized flood control projects in the Wichita Basin. Lake Kemp, with a capacity of 462,000 acre-feet, was constructed by local interests in 1923 for conservation purposes.

*Flood problem.*—Problem is mainly the disastrous threat to the city of Wichita Falls posed by the deteriorated Lake Kemp Dam. Average annual damages in absence of Lake Kemp would be about \$1 million.

*Recommended plan of improvement.*—Modification of existing Lake Kemp project by replacement of the existing outlet works and spillway with a new combined structure, raising the height of the dam about 3 feet, and strengthening the embankment, to provide 526,000 acre-feet of storage, of which 200,000 acre-feet would be for flood control.

*Estimated cost (price level of July 1960):*

Federal.....	\$6, 410, 000
Non-Federal.....	<sup>1</sup> 2, 203, 000
Total.....	8, 613, 000

<sup>1</sup> Includes cash contribution currently estimated at \$1,885,000.



*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$236, 500	\$227, 400	\$463, 900
Maintenance and operation.....	45, 900	33, 700	79, 600
Total.....	282, 400	261, 100	543, 500
Annual benefits:			
Damages prevented.....			730, 000
Conservation.....			649, 000
Total.....			1, 379, 000

*Benefit-cost ratio.*—2.5.

*Local cooperation.*—(a) Retain ownership and operate and maintain the project for a minimum period of 50 years after completion; (b) maintain the project and operate the flood-control features in accordance with regulations prescribed by the Secretary of the Army; (c) accomplish, without cost to the United States, all relocations and alterations of existing buildings, highways, bridges, sewers and related and special facilities; (d) hold and save the United States free from damages due to the construction works; (e) provide, without cost to the United States, all lands, easements, and rights-of-way necessary for the construction of the project; (f) adopt and enforce regulations to preserve the existing capacity of the channel through the city of Wichita Falls and prevent further encroachment; (g) adequately inform affected interests annually concerning the probability of residual damages after construction of the modifications; (h) provide free access to the lake in accordance with the principles of section 4 of the Flood Control Act of 1944; and (i) contribute 22.7 percent of the cost for the Federal construction, a contribution presently estimated at \$1,885,000, in equal annual payments, over a period of not more than 50 years beginning at the completion of construction, including interest on the unpaid balance at the rate prescribed at the time of construction for projects of this type.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture:

Department of Health, Education, and Welfare: Favorable.

State of Texas: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## WATER QUALITY STUDY, ARKANSAS-RED RIVER BASINS

(S. Doc. 105, 87th Con.)

*Location.*—The Arkansas and Red Rivers, and their tributaries, drain over 250,000 square miles including all of Oklahoma and parts of Colorado, New Mexico, Kansas, Texas, Mississippi, Arkansas, and Louisiana. About 74,500 square miles of the Arkansas River basin are above Keystone Reservoir, and about 39,700 square miles of the Red River Basin are above Denison Dam.

*Authority.*—Resolution, Senate Committee on Public Works, adopted December 16, 1959.

*Existing project.*—There are no existing projects in the area for control of water quality.

*Problem.*—The problem is to locate and measure the sources, establish the importance and types of pollutants entering the Arkansas and Red Rivers, and to develop practical means of controlling them. Studies to date show total daily chloride loads of 10,600 tons for Arkansas River at Keystone Reservoir and 3,800 tons for Red River near Denison Dam. These chloride loads clearly indicate the need for control and management of water quality.

*Recommended plan of improvement.*—Construction of two experimental projects, and performance of tests to determine their effectiveness in improvement of water quality. One project would be located on Prairie Dog Town Fork of Red River near Estelline, Tex.; the other on South Fork of Wichita River near Guthrie, Tex.

*Estimated cost (November 1961 prices).*—

Federal.....	\$300, 000
Non-Federal.....	
Total.....	300, 000

*Project economics.*—

Annual charges: The first costs shown in Estimated Cost include allowances for observations of test results.

Annual benefits: It is not yet possible to evaluate benefits in monetary terms. The test results will furnish valuable data and information concerning the possible economical solution of the overall problem on a basinwide scale.

*Benefit-cost ratio.*—Not evaluated.

*Local cooperation.*—None recommended.

*Comments of States and Federal agencies.*—

State of Oklahoma: Favorable.

State of Kansas: Favorable.

State of Arkansas: Favorable.

State of Texas: Favorable.

State of Louisiana: Favorable.

Department of Interior: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### BROKEN BOW RESERVOIR, MOUNTAIN FORK RIVER, OKLA.

(S. Doc. 137, 87th Cong.)

*Location.*—On Mountain Fork River, a tributary of Little River, in southeastern Oklahoma.

*Authority.*—Resolution, Committee on Public Works, U.S. Senate, adopted January 6, 1961.

*Existing project.*—The Broken Bow Reservoir was authorized for flood control and water supply by the Flood Control Act of 1958. Construction has been initiated on the basis that power facilities, upon authorization, will be installed either initially or in the future. The authorized project is about 5 percent completed.



*Problem.*—The study considers the advisability of providing storage and facilities for generation of hydroelectric power at Broken Bow Reservoir.

*Recommended plan of improvement.*—It is recommended that the project for Broken Bow Reservoir, now authorized for flood control and water supply, be modified to provide for hydroelectric power facilities in the initial construction and to include fish and wildlife conservation as a project purpose. Gross storage capacity would be increased from 541,100 acre-feet, as authorized, to 1,368,800 acre-feet.

*Estimated cost (price level of March 1961).*—

Federal.....	\$39, 600, 000
Non-Federal.....	( <sup>1</sup> )
Total.....	<sup>2</sup> 39, 600, 000

<sup>1</sup> Non-Federal interests to reimburse the United States for construction costs allocated to water supply, currently estimated at \$2,970,000.

<sup>2</sup> An increase of \$23,800,000 over estimated cost of authorized project.

*Project economics.*—

**Annual charges:**

Interest and amortization.....	\$1, 181, 900
Maintenance, operation and replacement.....	366, 600
Taxes foregone.....	578, 000
Total.....	<u>2, 126, 500</u>

**Annual benefits:**

Flood control.....	305, 500
Water supply.....	369, 700
Power.....	1, 959, 000
Recreation.....	750, 000
Fish and wildlife.....	460, 000
Total.....	<u>3, 844, 200</u>

*Benefit-cost ratio.*—1.8.

*Local cooperation.*—Pay the United States in accordance with the Water Supply Act of 1958, as amended, the entire amounts of the construction costs and the operation, maintenance, and replacement costs allocated to water supply, these amounts being presently estimated at \$2,970,000 and \$6,500 annually, respectively, for the project as modified, the final amounts to be determined by allocation after actual construction costs are known.

*Comments of the State and Federal agencies.*—

Department of the Interior: Recommends acquisition of certain additional lands for fish and wildlife purposes.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Oklahoma: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget expects that construction of power features of the Broken Bow Reservoir project, other than penstocks or other provisions for future power installations, not be undertaken until there is specific assurance that all costs including joint costs allocated to power can be returned with interest within a period of 50 years.



The Bureau of the Budget advises that, subject to consideration of the foregoing comment, there is no objection to the submission of the report to the Congress.

CLAYTON AND TUSKAHOMA RESERVOIRS, HUGO RESERVOIR, KIAMICHI RIVER, OKLA.

(S. Doc. 145, 87th Cong.)

*Location.*—Kiamichi River is in southeastern Oklahoma, and is a major tributary of the Red River.

*Authority.*—Resolution, Senate Committee on Public Works, adopted January 28, 1955.

*Existing project.*—Hugo Reservoir, with the damsite at mile 20.7 on the Kiamichi River, was authorized for flood control by the Flood Control Act of 1946 as a unit in the Red River below Denison Dam project, but construction has not been initiated.

*Flood problem.*—An average of three floods occur in the basin every year, with major flooding every 2 years. Since 1926, 10 major floods have occurred. Annual flood damages of \$140,000 are estimated to occur along the Kiamichi River below the Tuskahoma Dam site, excluding the area within Hugo Reservoir. Flood losses on Red River downstream from the mouth of Kiamichi River are estimated at \$3,700,000 annually, based on present conditions, with Denison Reservoir operating and with levees authorized prior to 1945 in place.

*Recommended plan of improvement.*—The plan of improvement consists of modification of the authorized Hugo Reservoir with the damsite at mile 17.6 on Kiamichi River and the recommended addition of two upstream reservoirs, Clayton and Tuskahoma, to provide for flood control and water conservation, including water supply, recreation, and fish and wildlife uses. The plan retains the degree of flood protection contemplated by the authorized Red River flood control project below the Denison Dam and affords additional flood protection of Kiamichi River. The recommendations of the Chief of Engineers permit discretion regarding the sequence of construction of the authorized Hugo Reservoir and the recommended Clayton and Tuskahoma Reservoirs. Under the plan the first cost of Hugo Reservoir would be \$23,065,000 compared to \$20,900,000 as now estimated. However, the net cost to the United States would be \$3,487,000 less than the cost as now estimated since local interests would reimburse the United States an amount of \$5,562,000 for water supply storage costs.

*Estimated cost (1960 prices).*—

	Clayton	Tuskahoma	Total
Federal.....	\$13, 174, 000	\$16, 574, 000	\$29, 748, 000
Non-Federal.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Total.....	13, 174, 000	16, 574, 000	29, 748, 000

<sup>1</sup> Bear construction costs allocated to water supply, currently estimated at \$6,221,000 and \$8,042,000 for Clayton and Tuskahoma Reservoirs, respectively.

*Project economics.*—

	Clayton	Tuskahoma	Total
Annual charges:			
Interest and amortization.....	\$502,090	\$631,420	\$1,133,510
Operation and maintenance, replacement.....	62,300	73,600	135,900
Total.....	564,390	705,020	1,269,410
Annual benefits:			
Flood control.....	190,000	238,000	428,000
Water supply.....	325,000	397,000	722,000
Recreation.....	96,000	82,000	178,000
Fish and wildlife.....	121,000	154,000	275,000
Total.....	732,000	871,000	1,603,000
Benefit-cost ratio.....	1.3	1.2	1.3

*Local cooperation.*—Bear all costs allocated to water supply in accordance with the Water Supply Act of 1958, as amended; hold and save the United States free from water rights claims. Local interests are willing to comply.

*Comments of the State and Federal agencies.*—

Department of the Interior: Recommend additional lands for fish and wildlife.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Believe that storage for water quality control can be utilized.

Federal Power Commission: Favorable.

State of Oklahoma: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget notes that the Corps of Engineers will work with the Public Health Service during advance planning of the reservoir projects with a view to determining the need and justification of storage for water quality control. In this connection, the Bureau indicates that in the event storage for water quality control displaces in whole or in part the currently contemplated water supply storage in the reservoirs and the water quality benefits are determined to be widespread, it would appear that the currently estimated ultimate reimbursements to the United States for water supply would not be realized. The Bureau has no objection to submission of the report to the Congress.

## KAYSINGER BLUFF RESERVOIR, OSAGE RIVER, MO.

(H. Doc. —, 87th Cong.)

*Location.*—Kaysinger Bluff Reservoir would be located in west-central Missouri immediately upstream from the existing Lake of the Ozarks, created by Bagnell Dam.

*Authority.*—Resolutions, Senate and House Committees on Public Works, adopted March 25, 1961, and June 7, 1961, respectively.

*Existing project.*—The Kaysinger Bluff project was authorized for flood control by the Flood Control Act of 1954, with a planned total storage capacity of 4,040,000 acre-feet. The reservoir is one of a system of nine authorized reservoirs in the Osage River Basin. Two are

under construction, two are under preconstruction planning, two are being restudied, no work is underway on the remainig three.

*Problems.*—The Osage River Basin is subject to damaging floods at any time of year. Also, the river is a major contributor to severe floods which endanger rich farmlands along the Missouri River, the St. Louis industrial area, and lands along the middle and lower Mississippi. There is a need for conservation storage to provide hydroelectric peaking power for integration with fuel generating plants, and to support fish and wildlife, recreation, and other uses.

*Recommended plan of improvement.*—Modification of the Kaysinger Bluff Reservoir project to provide for a reservoir with a total storage capacity of about 5,200,000 acre-feet and with hydroelectric power generating facilities, to serve the primary purposes of flood control, power, fish and wildlife, and recreation.

*Estimated cost (price level of 1961).*—

**Federal:**

Existing project-----	\$99,508,000
Proposed modification-----	43,245,000

Subtotal-----	142,753,000
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Non-Federal-----	None
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Total-----	142,753,000
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*Project economics.*—

**Annual charges—all Federal:**

Interest and amortization-----	\$4,344,000
Operation, maintenance, and replacement-----	425,000
Loss of land productivity-----	494,000
Taxes foregone-----	49,000

Total-----	5,312,000
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**Annual benefits:**

Flood control-----	4,264,000
Power-----	1,797,000
Fish and wildlife-----	500,000
Recreation-----	800,000

Total-----	7,361,000
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*Benefit-cost ratio.*—1.4.

*Local cooperation.*—None required.

*Comments of States and Federal agencies.*—

Department of the Interior: Recommends mineral evaluation in preconstruction planning. Recommends national wildlife refuge as part of project.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Missouri: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget concurs in the need for a reexamination of the financial feasibility of the power features during the design stage, on the basis of power values then appropriate. The Bureau advises that it would expect that construction of power features of the Kaysinger Bluff project, other than penstocks or other provisions for future power installations, not be undertaken until there is specific assurance that all costs



including joint costs allocated to power can be returned with interest within a period of 50 years. Also, the Bureau recommends that the decision on establishment of a national wildlife refuge in conjunction with the Kaysinger Bluff Reservoir project be deferred until an adequate long-range plan for the refuge system is developed which will permit a meaningful evaluation of the contribution of the proposed refuge to the purposes of the national wildlife refuge system; and, until means are developed for financing refuge land acquisitions related to water resources projects in a way which will assure the advantages of unified financing of the total refuge land acquisition program. The BOB also advises that there is no objection to submission of this report to the Congress.

*Action by the Secretary of the Army.*—Concurs with the Bureau of the Budget.

#### KANSAS RIVER, KANS., NEBR., AND COLO.

(S. Doc. 122, 87th Cong.)

*Location.*—Kansas River flows generally eastward and drains an area of about 60,000 square miles in eastern Colorado, southern Nebraska, and north-central Kansas. The river enters Missouri River at the Kansas Citys. Improvements recommended in the report are located in eastern Kansas and at the Kansas Citys.

*Authority.*—Resolutions, Senate Committee on Public Works, adopted August 20, 1953, and June 16, 1954.

*Existing projects.*—Completed corps reservoirs in the basin are Kanopolis and Harlan County. Corps reservoirs under construction are Tuttle Creek and Milford. Corps reservoirs authorized but not started are Perry, Wilson, and Pioneer. The corps has 17 local flood protection projects either completed, under construction, or authorized, but not started, in the basin. The Bureau of Reclamation has completed eight reservoirs in the basin. The Soil Conservation Service has completed five watershed protection projects. Local interests have completed 250 miles of levees.

*Problems.*—Many severe floods have occurred in the basin. The ravaging 1951 floods resulted in estimated damages of \$725 million. Also, severe droughts have been experienced, indicating the need for water conservation.

*Recommended improvements.*—Four multiple-purpose reservoirs for flood control, water supply, and fish and wildlife and general recreation. The reservoirs would be located on tributaries to the main Kansas River in the lower, eastern end of the basin, and would range in gross capacity from 157,000 to 384,000 acre-feet. Also recommended are improvements of existing local protection works at the Kansas Citys.

*Estimated cost (September 1960 prices).*—

Item	Federal	Non-Federal	Total
Reservoirs.....	\$70, 240, 000	(1)	\$70, 240, 000
Local protection works.....	17, 830, 000	\$3, 050, 000	20, 880, 000
Total.....	88, 070, 000	3, 050, 000	91, 120, 000

<sup>1</sup> Local interests to reimburse the United States an amount currently estimated at \$10,919,000 for water supply. Thus, the total net cost to the United States for all recommended work is estimated at \$77,151,000.

*Project economics.—Reservoirs.—*

Item	Reservoir				
	Woodbine	Onaga	Grove	Clinton	Total
Annual charges:					
Interest and amortization.....	\$502,000	\$850,000	\$467,000	\$1,023,000	\$2,842,000
Maintenance, operation, and replacement.....	55,000	68,000	64,000	89,000	1 276,000
Total.....	557,000	918,000	531,000	1,112,000	3,118,000
Annual benefits:					
Flood control.....	731,000	1,205,000	509,000	1,026,000	3,471,000
Water supply.....	75,000	270,000	120,000	210,000	675,000
Fish and wildlife recreation.....	27,000	41,000	82,000	107,000	257,000
General recreation.....	141,000	195,000	66,000	201,000	603,000
Total.....	974,000	1,711,000	777,000	1,544,000	5,006,000
Benefit-cost ratios.....	1.7	1.9	1.5	1.4	1.6

<sup>1</sup> Net annual cost to the United States for maintenance, operation, and replacements currently estimated at \$224,500.

*Local protection works.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$645,000	\$142,000	\$787,000
Maintenance, operation, and replacement.....		5,000	5,000
Economic losses.....			11,000
Total.....	645,000	147,000	803,000
Annual benefits: Flood control.....			1,199,000

*Benefit-cost ratio.—1.5.*

*Local cooperation: Reservoirs.*—Prior to construction furnish assurances to make demands for use of water supply storage within a period of time which will permit repayment of costs allocated to water supply within the life of the project, as determined by the Chief of Engineers, in accordance with the Water Supply Act of 1958 as amended by the Water Pollution Control Act Amendments of 1961; hold the United States free from water rights claims; prevent encroachments on capacities of streams below reservoirs necessary for reservoir operation.

*Local protection works.*—Furnish necessary lands, easements, rights-of-way; make necessary alterations and relocations of utilities; hold and save the United States free from damages; maintain and operate as prescribed. Responsible local interests have indicated they will comply with all foregoing requirements.

*Comments of States and Federal agencies.—*

State of Kansas: Favorable. Urge early authorization and construction.

State of Missouri: Favorable.

Department of Interior: Favorable. Recommend that all joint costs allocated to fish and wildlife be nonreimbursable Federal costs.

Department of Agriculture: Favorable.

Federal Power Commission: Favorable.



Department of Health, Education, and Welfare: Favorable.

Department of Commerce: Favorable.

*Comments of the Bureau of the Budget.*—No objection to transmission of the report to Congress. However, the Bureau of the Budget notes that the Governor of Kansas and the Department of the Interior, in commenting on the proposed report, urged that joint costs allocated to fish and wildlife values be borne entirely by the Federal Government, rather than shared in the manner recommended by the Chief of Engineers; and, that in view of more recent recommendations by the Chief of Engineers on cost sharing arrangements for fish and wildlife and other recreation in connection with other reservoir projects, consideration might be given this matter before transmitting the report to the Congress.

*Action of the Secretary of the Army.*—The Secretary of the Army in his letter transmitting the report to Congress, recommended that local interests not be required to reimburse the United States for any portion of the construction costs and annual operation and maintenance costs of the reservoirs allocated to fish and wildlife recreation, such portions currently estimated at \$1,221,000 and \$4,200, respectively.

*Remarks.*—The committee notes that some local opposition to Woodbine Reservoir on Lyons Creek is evidenced. The committee believes that authorization of Woodbine Reservoir should be deferred subject to submission of a new feasibility report by the Chief of Engineers to the 88th Congress, which shall take into account related plans of the Soil Conservation Service, the Kansas Water Resources Board, and Lyons Creek Watershed Joint District No. 41, and preparation of such report should be authorized. Otherwise, the committee endorses at this time the plan of improvement for development of the lower Kansas River Basin.

#### PAPILLION CREEK AND TRIBUTARIES, NEBRASKA

(H. Doc. No. 475, 87th Cong.)

*Location.*—The Papillion Creek Basin is located in the western suburbs of Omaha, Nebr., and it empties into the Missouri River a few miles downstream from the city.

*Authority.*—Resolution of the Committee on Flood Control, House of Representatives, adopted July 23, 1946.

*Existing project.*—There are no Federal improvements for flood control in the basin. Local interests have constructed levees and improved the stream channels at various points in the basin.

*Flood problem.*—Local channel and levee improvements have been partially effective but runoff and flood intensities have increased with urbanization. The existing channel capacities on Papillion Creek and tributaries are generally inadequate for flood flows.

*Recommended plan of improvement.*—The proposed plan consists essentially of channel enlargement of Little Papillion Creek, together with necessary bridge modifications and intermittent riprapping, for a distance of about 6.5 miles.

*Estimated cost (price level of December 1960).*—

Federal.....	\$2, 122, 000
Non-Federal.....	1, 400, 000
Total.....	3, 522, 000



*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$77,000	\$65,200	\$142,200
Maintenance and operation.....	0	2,800	2,800
Total.....	77,000	68,000	145,000
Annual benefits: Damages prevented.....			199,700

*Benefit-cost ratio.—1.4.*

*Local cooperation.*—Furnish all lands, easements, and rights-of-way; hold and save the United States free from damages; make alterations to all road, highway, bridge and utilities; maintain and operate. Local interests have indicated they are willing and able to comply with these requirements.

*Comments of State and Federal agencies.—*

State of Nebraska: Favorable.

Department of Interior: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## INDIAN CREEK, IOWA

(H. Doc. 438, 87th Cong.)

*Location.*—Indian Creek rises about 4 miles north of Council Bluffs, Iowa, on the east side of the Missouri River opposite Omaha, Neb., flows in a southerly direction through the city of Council Bluffs to the river, nearly 6 miles downstream.

*Authority.*—Resolution of the Committee on Public Works, House of Representatives, adopted July 22, 1947.

*Existing project.*—The only Federal improvements for flood control in the basin have been constructed downstream from 29th Avenue to provide an outlet and tieback levees in conjunction with the Missouri River agricultural levee project. Local interests have improved the channel from the north city limits through the highly developed section with nearly 3 miles of open concrete channel and closed conduit.

*Flood problem.*—The topographic characteristics of the upland area cause runoff in Indian Creek Basin to funnel into the heart of Council Bluffs and create potential for a major flood disaster. The standard project flood discharge is considerably in excess of the existing channel capacity of 4,800 cubic feet per second.

*Recommended plan of improvements.*—The proposed plan is part of a joint effort by the Corps of Engineers and the Soil Conservation Service which includes a dam and reservoir for flood control combined with watershed measures in the headwaters. The reservoir recommended by the corps to be located just above the north city limits would be an earth fill structure with a height of 70 feet and length of 1,900 feet creating a reservoir of about 8,600 acre-feet. The SCS portion of the plan consists of land treatment and structural measures to reduce erosion in the headwaters and silt deposition in the existing channel through the city, which will be reported on by that agency.

*Estimated cost (price of level of 1960).—*

Federal.....	\$1, 270, 000
Non-Federal.....	1, 260, 000
<b>Total.....</b>	<b>2, 530, 000</b>

*Project economics.—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$46, 400	\$58, 600	\$105, 000
Maintenance and operation.....		3, 000	3, 000
<b>Total.....</b>	<b>46, 400</b>	<b>61, 600</b>	<b>108, 000</b>
<b>Annual benefits:</b>			
Damages prevented.....			127, 900
Reduced channel maintenance.....			1, 300
<b>Total.....</b>			<b>129, 200</b>

*Benefit-cost ratio.—1.2.*

*Local cooperation.*—Furnish all lands, easements, and rights-of-way; hold and save the United States free from damages; make all road, highway, and utility alterations and modifications; enter into contract for reimbursement of the entire cost of operation and maintenance, currently estimated at \$3,000 annually; and provide, in co-operation with the Soil Conservation Service under continuing authorizations and funding arrangements, an adequate erosion-control program as developed by the SCS and as contemplated in the overall plan of improvement, the installation of such program to be undertaken in advance of or concurrently with construction of the dam and reservoir by the Corps of Engineers. Local interests have indicated they are willing and able to comply with these requirements.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

State of Iowa: Favorable.

*Comment of the Bureau of the Budget.*—No objection.

## KOKOSING RIVER BASIN, OHIO

(H. Doc. No. 220, 87th Cong.)

*Location.*—Kokosing River rises in Morrow County, Ohio, and flows through Knox County and into Coshocton County where it joins the Mohican River to form the Wolhonding River. Mount Vernon is located in Knox County at about river mile 24.

*Authority.*—Resolutions of Public Works Committee, U.S. House of Representatives, adopted March 5, 1952 and June 3, 1959.

*Existing project.*—None.

*Flood problem.*—Damaging floods are exceeded on the average of once in 10 years at Fredericktown, once in 5 years at Mount Vernon, and once in 25 years at Millwood. The maximum flood of record in January 1959 had a peak flow of 38,000 cubic feet per second at Mount Vernon. Total damages from the 1959 flood are estimated at \$5,300,000. The average annual damages are estimated at \$151,000 on the basis of mid-1959 prices and stage development.

*Recommended plan of improvement.*—Construction of the North Branch Reservoir on North Branch of Kokosing River, about 2.2 miles upstream from Fredericktown, Ohio, and snagging and clearing of Kokosing River downstream from Tilden Avenue Bridge in Mount Vernon for a distance of about 24,500 feet.

*Estimated cost (price level of June 1959).*—

	North Branch Dam and Reservoir	Mount Ver- non clearing and snagging	Total
Federal.....	\$2,334,000	\$104,000	\$2,438,000
Non-Federal.....		113,000	113,000
Total.....	2,334,000	217,000	2,551,000

*Project economics.*—

	North Branch Dam and Reservoir	Mount Ver- non clearing and snagging	Total
Annual charges:			
Federal:			
Interest and amortization.....	\$85,300	\$3,700	\$89,000
Operation and maintenance.....	2,400		2,400
Total.....	87,700	3,700	91,400
Non-Federal:			
Interest and amortization.....		4,400	4,400
Operation and maintenance.....		5,500	5,500
Loss of land productivity.....	4,900		
Total.....	92,600	13,600	106,200
Annual benefits: Prevention of flood damages.....	114,700	28,200	142,900
Benefit-cost ratio.....	1.2	2.1	1.3

*Local cooperation.*—For channel snagging and clearing, furnish lands, and rights-of-way; hold and save the United States free of damages; maintain works, repair levees along Kokosing River at Mount Vernon; enlarge the flowage opening at West High Street Bridge; accomplish all changes, relocations, and alterations made necessary by the works, except for alteration of railroad bridge at mouth of Dry Creek; prevent encroachment; and adequately inform local interests that the combined project will not provide protection against floods greater than that of January 1959. Agree that construction of the reservoir will be contingent upon prior or simultaneous accomplishment of the snagging and clearing work. Local interests have indicated their willingness and ability to comply with the requirements of local cooperation.

*Comments of State and Federal agencies.*—

Department of Interior: No objection.

State of Ohio: Favorable.

*Comments of the Bureau of the Budget.*—No objection.



## MAD RIVER ABOVE HUFFMAN DAM, OHIO

(H. Doc. 439, 87th Cong.)

*Location.*—Mad River is a tributary of the Miami River at Dayton, Ohio. Buck Creek, the principal tributary, flows through Springfield, Ohio, to its junction with Mad River.

*Authority.*—Resolution of Public Works Committee, U.S. House of Representatives, adopted February 17, 1959.

*Existing project.*—None.

*Flood problem.*—On Mad River from Springfield to Huffman Dam, a recurrence of the 1913 flood would cause greater damage than any other known past flood. At present development, damages at Wright-Patterson Air Force Base would be \$1,400,000; rural losses would be \$580,000, and urban damages would be \$120,000. Average annual damages are estimated at \$189,000. On Buck Creek where the principal development is the Springfield metropolitan area, a recurrence of the 1929 flood would result in urban damages, mostly industrial, of \$2,238,000, and rural losses would be \$38,000. Average annual damages for the reach are estimated at \$104,000.

*Recommended plan of improvement.*—Provides for construction of a gravel-fill dam at mile 7.3 on Buck Creek. Total storage would be 32,800 acre-feet of which 30,400 acre-feet would be for flood control and 2,400 acre-feet would be for recreation and conservation.

*Estimated cost (price level of July 1960).*—Federal, \$7,930,000.

*Project economics.*—

## Annual charges:

Interest and amortization.....	\$295, 000
Maintenance and operation.....	42, 000
Loss of land productivity.....	14, 000
Total.....	<u>351, 000</u>

## Annual benefits:

Flood damages prevented.....	280, 000
Higher use of land.....	9, 000
Recreation.....	265, 000
Total.....	<u>554, 000</u>

*Benefit-cost ratio.*—1.6.

*Local cooperation.*—Prevent encroachment in Buck Creek channel below the reservoir. Local interests are willing to comply with the requirement of local cooperation.

*Comments of the State and Federal agencies.*—

State of Ohio: Favorable.

Department of Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

*Comments of the Bureau of the Budget.*—No objection to submission of report to Congress. However, the Bureau of the Budget would expect that prior to a request for funds to initiate construction of the Buck Creek Reservoir, the Corps of Engineers would review the

economic evaluation of the project in light of the water resource evaluation standards adopted by the administration.

*Remarks.*—The committee notes that in this project, as in others, the comments of the Bureau of the Budget merely reflect the policy of the Corps of Engineers which has always been followed in the presentation of projects to the Appropriations Committees.

#### KENTUCKY RIVER, KY.

(H. Doc. 423, 87th Cong.)

*Location.*—The Kentucky River, a tributary of the Ohio River, is located in central Kentucky.

*Authority.*—Resolutions of Public Works Committee of the Senate adopted April 22, 1953, and of the House of Representatives adopted April 21, 1950, and July 29, 1953, for flood control and navigation.

*Existing project.*—The plan of development for the basin includes the Buckhorn, Booneville, and Jessamine Creek Reservoir projects and local protection works at Jackson and Frankfort for flood control. There is a 6-foot-deep navigation project from the Ohio River to the confluence of the Middle and North Forks about 260 miles formed by 14 locks and dams.

*Flood problem.*—A recurrence of the January–February 1957 flood would cause damages estimated at \$11.7 million; average annual damages on main stem and principal tributaries are estimated at \$2.7 million.

*Recommended plan of improvement.*—Plan provides for 3 additional dams and reservoirs for flood control and recreation on Red River, Carr Fork and Eagle Creek. Navigation improvements were not found warranted at this time. Recommendation also provides for deletion from the plan of the Jessamine Creek project which has not been constructed.

*Estimated cost (price level of January 1958).*—

	Reservoir projects			
	Red River	Carr Fork	Eagle Creek	Total
Federal.....	\$8,020,000	\$9,020,000	\$8,980,000	\$26,020,000

#### *Project economics.*—

	Reservoir projects		
	Red River	Carr Fork	Eagle Creek
Annual charges:			
Interest and amortization.....	\$294,000	\$314,000	\$322,000
Maintenance, operation, and major replacements.....	40,000	32,000	39,000
Loss of land productivity.....	2,000	8,000	19,000
Total.....	336,000	354,000	380,000
Annual benefits:			
Flood damages prevented.....	421,000	457,000	329,000
Recreation.....	70,000	30,000	170,000
Total.....	491,000	487,000	499,000
Benefit-cost ratio.....	1.5	1.4	1.3

*Local cooperation.*—None.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: No objection. Requested recreation be made a project purpose in Red River Reservoir.

Department of Commerce: No objection.

Department of Health, Education, and Welfare, PHS: Favorable.

Federal Power Commission: No objection.

State of Kentucky: Favorable.

*Comments of the Bureau of the Budget.*—No objection to submission of report to Congress. However, the Bureau of the Budget would expect that prior to a request for funds to initiate construction of the Eagle Creek Reservoir, the Corps of Engineers would review the economic evaluation of the project in light of the water resource evaluation standards adopted by the administration.

#### BUCKHANNON RIVER, W. VA.

(S. Doc. 43, 87th Cong.)

*Location.*—Buckhannon River is formed in Upshur County, W. Va., by the junction of its right and left forks, thence flows generally northerly 46 miles to the Tygart River about 28 miles upstream of Tygart Dam. The city of Buckhannon, at mile 25, is on a U-bend of the river about 2.3 miles long.

*Authority.*—Resolution of Public Works Committee of the U.S. Senate, adopted April 30, 1958.

*Existing project.*—None.

*Flood problem.*—Floods of major proportions may occur at Buckhannon at any time of the year. The maximum flood of record, in March 1918, had a peak flow of 12,000 cubic feet per second and reached an elevation of 1,416.3, or 7.3 feet above the no-damage stage, at the Elias Street Bridge. Floods exceeding 8,000 cubic feet per second cause serious damage and occur on the average of once in 2.4 years. A recurrence of the 1918 flood under 1960 conditions would inundate 511 acres within the city and cause damages estimated at \$397,000, principally to residential and commercial properties. Average annual damages, on the basis of 1960 conditions and values, are estimated at \$71,300.

*Recommended plan of improvement.*—Provides for channel improvement by widening, deepening, and realining the channel from a point 1,280 feet below the lower Baltimore & Ohio Railroad bridge about 4 miles downstream of the corporate limits, to and through the existing raceway, a distance of approximately 4.6 miles.

*Estimated cost (price level of April 1960).*—

Federal	-----	\$1, 206, 000
Non-Federal	-----	54, 000
Total	-----	1, 260, 000



*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$45,700	\$2,900	\$48,600
Maintenance and operation.....		2,500	2,500
Total.....	45,700	5,400	51,100
Annual benefits: Flood damages prevented.....			62,900

*Benefit-cost ratio.—1.2.*

*Local cooperation.*—Furnish lands and rights-of-way; hold and save the United States free from damages; maintain all works after completion; perform all necessary relocations and alterations of utility facilities; establish channel limit lines and prevent encroachment; annually inform local interests that the project will not provide protection against maximum floods; and that under extraordinary stream runoff conditions the water level may exceed elevation 1,416 at the Elias Street Bridge. Local interests are willing to accept the terms of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Agriculture: No objection.

State of West Virginia: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## GUYANDOT RIVER AND TRIBUTARIES, W. VA.

(H. Doc. 569, 87th Cong.)

*Location.*—Guyandot River, a tributary of the Ohio River at Huntington, is located in southwestern West Virginia.

*Authority.*—Resolutions of the Public Works Committees, U.S. Senate and House of Representatives adopted February 16, 1957, and July 1, 1958, respectively.

*Existing project.*—Mud River Reservoir was authorized by Flood Control Act approved June 28, 1938. Floodwalls have been constructed at mouth of stream for protection of Huntington against Ohio River floods and Guyandot River backwater.

*Flood problem.*—The areas subject to greatest damages are those along and at the mouth of Dingess Run at Stallings, and along Island Creek at Logan. Other areas frequently damaged are the communities of Mullens, Pineville, Man, Baileyville, Gilbert, and Chapmanville, all along the main stem. The maximum flood of record, except at Man, occurred in January 1957. Basin damages of over \$2,500,000 were concentrated principally around Logan, where losses approximated \$1,750,000. The average annual damages in the Guyandot River Basin under July 1961 conditions are estimated at \$407,000.

*Recommended plan of improvement.*—Provides for construction of a dam at about mile 117 on Guyandot River, about 5 miles upstream of Justice, W. Va. Total storage would be 196,000 acre-feet, of which 22,000 acre-feet would be for sediment storage and recreation and 174,000 acre-feet would be for flood control. Of the flood-control capacity 3,000 acre-feet would be reserved for water quality control on a seasonal basis.

*Estimated cost (price level of July 1961).—All Federal, \$60,477,000.*  
*Project economics.—*

Annual charges:		All Federal
Interest and amortization.....		\$1, 807, 000
Maintenance and operation.....		65, 000
Major replacements.....		2, 000
Loss of land productivity.....		24, 000
Total.....		1, 898, 000
Annual benefits:		
Flood damages prevented.....		1, 784, 000
General recreation.....		296, 000
Fish and wildlife, recreation.....		35, 000
Water quality control.....		25, 000
Total.....		2, 140, 000

*Benefit-cost ratio.—1.1.*

*Local cooperation.—None required.*

*Comments of the State and Federal agencies.—*

Department of Agriculture: No objection.

Department of the Interior: No objection.

Department of Commerce: No objection.

Department of Health, Education, and Welfare: No objection.

Federal Power Commission: Favorable.

State of West Virginia: Favorable.

*Comments of the Bureau of the Budget.—*The Bureau of the Budget states that, if the project is authorized by Congress, the Bureau would expect any request for funds to initiate construction to be accompanied by a reevaluation report containing adequate evidence that the project is economically justified after meeting certain conditions which would minimize the loss of mineral reserves.

The Bureau further states that it believes that, if the project is authorized by the Congress, arrangements should be made in connection with preconstruction planning for further consideration of the views of affected interests within the project area. The Bureau notes that it would appear advisable that provision be made for conduct of public hearings in the locality, which under usual Corps of Engineers procedures would have appropriately preceded a recommendation for authorization of the project. Such hearing could be carried out in connection with the public meetings required under the provisions of the Land Acquisition Policy Act of 1960.

The Bureau of the Budget advises that there is no objection to the submission of the report to the Congress; however, it states that no commitment can be made at this time as to when any estimate of appropriation would be submitted for construction of the project, if authorized by the Congress, since this would be governed by the President's budgetary objectives as determined by the then prevailing fiscal situation.

TWELVEPOLE CREEK, W. VA.

(H. Doc. 520, 87th Cong.)

*Location.—*Twelvepole Creek, a tributary of the Ohio River, is in southwestern West Virginia.

*Authority.—*Resolution of Public Works Committee, House of Representatives, adopted June 13, 1956.



*Existing project.*—East Lynn Reservoir on East Fork, was authorized by the Flood Control Act of 1938 as a unit in the comprehensive plan for flood control in the Ohio River Basin. Floodwalls have been constructed at mouth of the stream, for protection of Huntington and Ceredo from Ohio River floods.

*Flood problem.*—Headwater floods cause damages from above the junction of East and West Forks to mile 25 on Twelvepole Creek. From mile 25 to mile 10, damages are caused by a combination of headwater and Ohio River backwater, while below mile 10, damages are restricted to backwater flooding. Numerous areas are subject to flooding along both forks but more extensive areas are flooded along East Fork below Stiltner, particularly at East Lynn. The maximum flood of record, February 1939, reached a crest stage of 31 feet at Wayne and had an estimated discharge of 21,900 cubic feet per second. The average annual damages in the basin are estimated at \$141,500 under November 1960 prices and conditions.

*Recommended plan of improvement.*—Provides for construction of an earth-fill dam at mile 3.3 on Beach Fork. Total storage would be 43,785 acre-feet at which 37,530 acre-feet would be for flood control and 6,255 acre-feet would be permanent storage.

*Estimated cost (price level of June 1961).*—All Federal, \$11 million.

*Project economics.*—

Annual charges:

Interest and amortization.....	\$325, 000
Maintenance and operation.....	40, 000
Major replacement.....	3, 500
Loss of land productivity.....	11, 500

Total.....	380, 000
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Annual benefits:

Flood damages prevented.....	316, 400
Recreation.....	254, 800

Total.....	571, 200
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*Benefit-cost ratio.*—1.5.

*Local cooperation.*—None required.

*Comments of the State and Federal agencies.*—

Department of Interior: No objections.

Department of Agriculture: No objections.

Department of Commerce: No objections.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of West Virginia: Favorable.

*Comments of the Bureau of the Budget.*—No objections.

#### CRAB CREEK AT YOUNGSTOWN, OHIO

(H. Doc. 440, 87th Cong.)

*Location.*—Crab Creek is a tributary of the Mahoning River at Youngstown, Ohio.

*Authority.*—Resolution of Public Works Committee, U.S. House of Representatives, adopted February 17, 1959.

*Existing project.*—None.

*Flood problem.*—The flood of January 1959 was the largest of modern record, with an estimated peak discharge of 2,550 cubic feet



per second downstream of the Valley Street Bridge. Five other floods, approaching that of January 1959 in magnitude, occurred in the period 1936 through April 1959. Recurrence of the January 1959 flood would result in damages of \$233,900 based on 1960 prices and development. Average annual damages under 1960 conditions would be \$115,000. The backwater effect of the Mahoning River during the 1959 flood was estimated to have been downstream of the damage area in the lower reach of Crab Creek.

*Recommended plan of improvement.*—Provides for enlarging, paving, and clearing about 2.4 miles of creek channel within the city, and for minor dredging in Mahoning River at the mouth of the creek. The work would require replacement of three railroad bridges and alteration of utilities.

*Estimated cost (price level of May 1960).*—

Federal.....	\$2, 268, 000
Non-Federal.....	245, 000
Total.....	2, 513, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$85, 500	\$12, 500	\$98, 000
Maintenance and operation.....		8, 000	8, 000
Total.....	85, 500	20, 500	106, 000
Annual benefits: Flood damages prevented.....			120, 000

*Benefit-cost ratio.*—1.1.

*Local cooperation.*—Furnish lands and rights-of-way; hold and save the United States free from damages; maintain and operate the works after completion; accomplish changes and alterations except the three railroad bridges; prevent encroachment; bear additional cost resulting from construction of cutoff channel near Andrew Avenue if such is desired; prevent dumping in creek; annually inform local interests of limited degree of protection; and enlarge waterway openings of restrictive bridges downstream of Valley Street. Local interests are willing to comply with the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

State of Ohio: Favorable.

Department of Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### SCIOTO RIVER BASIN, OHIO

(H. Doc. —, 87th Cong.)

*Location.*—The Scioto River, a major tributary of the Ohio River at Portsmouth, is located in central Ohio.

*Authority.*—Flood Control Act approved August 28, 1937.

*Existing project.*—Delaware Reservoir, on Olentangy River, constructed in 1951 is a Federal project. A local protection project at the mouth of the Scioto River, completed in 1950, provides a high degree of protection to Portsmouth and New Boston, Ohio, primarily

from Ohio River floods. Reservoirs on Big Darby, Deer Paint, and Rocky Fork Creeks are included in the comprehensive plan for the Ohio River Basin approved by the Flood Control Act of June 28, 1938. None have been built by the Federal Government. Rocky Fork project was constructed by the State of Ohio.

*Flood problem.*—The principal damage centers are at Columbus, Chillicothe, Prospect, Greencamp, LaRue, and Kenton. The maximum flood of record for most of the basin occurred in March 1913, in which 145 deaths were recorded. The January 1959 flood exceeded the March 1913 flood in the Alum Creek and Big Walnut Creek areas and caused widespread damages in other parts of the basin. The January 1959 flood caused damages in the basin estimated at about \$11,950,000. Average annual damages for the basin are estimated at \$3,660,000, based on July 1961 prices and conditions.

*Recommended plan of improvement.*—Provides for construction of Alum Creek, Mill Creek, and Salt Creek Reservoirs, all for flood control, general and fish and wildlife recreation, and related purposes: channel improvements in the Scioto River at Columbus, and flood protection at Chillicothe by construction of concrete walls, earth levees, and appurtenant works; and modification of the present authorization of Deer Creek Dam and Reservoir to provide a waterfowl management unit, consisting of additional project lands, a subimpoundment pool, and public water supply and sanitary facilities.

*Estimated cost (price level of July 1961).*—

	Federal	Non-Federal	Total
Local protection:			
Columbus.....	\$445,000	\$126,000	\$571,000
Chillicothe.....	2,462,000	905,000	3,367,000
Reservoirs:			
Alum Creek.....	122,700,000	-----	122,700,000
Mill Creek.....	16,550,000	-----	16,550,000
Salt Creek.....	13,150,000	-----	13,150,000
Deer Creek waterfowl management unit.....	540,000	-----	540,000
Total.....	55,847,000	1,031,000	56,878,000

<sup>1</sup> \$11,060,000 is reimbursable by local interests for water supply.

### *Project economics.*—

Project	Annual economic costs	Annual benefits	Benefit-cost ratio
Local protection:			
Columbus.....	\$30,000	\$169,000	5.6
Chillicothe.....	111,000	138,000	1.2
Recommended reservoirs:			
Alum Creek.....	888,000	3,030,000	3.4
Mill Creek.....	624,000	1,131,000	1.8
Salt Creek.....	534,000	1,146,000	2.1
Deer Creek wildlife management unit.....	32,000	( <sup>1</sup> )	-----
Total.....	2,219,000	5,614,000	-----

<sup>1</sup> The additional lands and facilities in conjunction with the area which would be used jointly for waterfowl management and other project purposes would provide substantial pond fishing, farm game hunting, waterfowl hunting, and other recreational opportunities.

*Local cooperation.*—Reimburse the United States the first and annual costs allocated to water supply from Alum Creek Reservoir, an amount presently estimated at \$11,060,000 and \$30,000, respectively; for the channel improvement at Columbus, Ohio, and the local-protection works at Chillicothe, Ohio, furnish lands and rights-



of-way; hold and save the United States free from damages; maintain the improved Columbus channel and prevent encroachment thereon; maintain and operate the works at Chillicothe; and prior to construction at Chillicothe, provide a highway embankment and apurtenant drainage works, perform certain remedial works at U.S. Highway 23 bridge, backfill existing gravel pits, and widen the channel of Scioto River for a distance of 22,000 feet: *Provided further*, That construction of the individual projects recommended for authorization will not be construed as a commitment by the Federal Government nor by responsible non-Federal interests for construction of the remaining projects; *and provided further*, That construction of the local-protection works at Chillicothe be contingent upon prior construction and operation of the upstream reservoirs for flood control. Local interests are willing to comply with the requirements of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: No objection.

Department of Health, Education, and welfare: Favorable.

Federal Power Commission: Favorable.

State of Ohio: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget recommends that authorization of the proposed modification to Deer Creek Reservoir for waterfowl enhancement and for improved hunting and fishing recreation be deferred until such time as policy matters pertaining thereto are resolved.

*Action by the Secretary of the Army.*—The Secretary of the Army concurred in the views of the Bureau of the Budget. On this basis the net cost to the United States is estimated at \$55,307,000.

*Remarks.*—The committee has accepted the estimate of the Corps of Engineers.

ALLEGHENY RIVER AT SALAMANCA, N.Y.

(H. Doc. 166, 87th Cong.)

*Location.*—Allegheny River rises in north-central Pennsylvania, flows northwesterly to Salamanca, N.Y., and thence southwesterly to Pittsburgh, Pa., where it joins the Monongahela to form the Ohio River.

*Authority.*—Resolution of the Committee on Public Works, U.S. Senate, adopted May 9, 1949, and, resolution of the Committee on Public Works, House of Representatives, adopted July 6, 1949.

*Existing project.*—None.

*Flood problem.*—Flooding in Salamanca is caused by rainfall and snowmelt, coupled with the inadequacy of the river channel through the city and downstream.

*Recommended plan of improvement.*—Provides for construction of levees and floodwalls with apurtenant interior drainage facilities including pumping plants, in three areas, along the Allegheny River at Salamanca, N.Y.

*Estimated cost (price level of July 1960).—*

Federal	\$1, 390, 000
Non-Federal	275, 000
Total	1, 665, 000



*Project economics.*—

	Federal	Non-Federal	Total
Annual charges.....	\$51,900	\$14,600	\$66,500
Annual benefits: Flood damages prevented.....			74,500

*Benefit-cost ratio.*—1.12.

*Local cooperation.*—Furnish lands and rights-of-way; hold and save the United States free from damages; accomplish all changes, relocations, and alterations of buildings, utilities, and structures; prevent encroachment on the improved waterway; and maintain and operate the works after completion. New York State Flood Control Commission has furnished assurances of local cooperation.

*Comments of State and Federal agencies.*—

Department of the Interior: No objection.

State of New York: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## FRENCH CREEK BASIN, PA.

(S. Doc. 95, 87th Cong.)

*Location.*—French Creek, a major tributary of the Allegheny River, is located in northwestern Pennsylvania and southwestern New York.

*Authority.*—Resolution of Public Works Committee, U.S. Senate, adopted May 12, 1950.

*Existing project.*—French Creek Reservoir below Cambridge Springs, authorized by the Food Control Acts of 1936 and 1938, would have flood control storage of 117,000 acre-feet. This project is presently classified inactive. A Federal snagging and clearing project at Cochranton, Pa., was completed in 1948.

*Flood problem.*—The flood problem is most severe at Meadville, but exists wherever the stream slopes are flat along the entire French Creek Valley particularly from above Cambridge Springs to and including Cochranton. The flood of April 1947, the highest of record in the upper basin, overflowed 7,000 acres of rural land and 600 acres of urban land. Its recurrence in 1960 would have caused damages estimated at \$3 million. The January 1959 flood, augmented by an ice jam, resulted in the maximum stages of record at Meadville which under 1960 conditions would also have caused damages of almost \$3 million. The average annual flood damages are estimated at \$1,260,000.

*Recommended plan of improvement.*—Consists of a system of three reservoirs with the following physical features:

Item	Reservoir		
	Union City	Muddy Creek	Woodcock Creek
Stream.....	French Creek.....	Muddy Creek.....	Woodcock Creek.....
Location, river miles.....	71.2.....	61.....	46.....
Type.....	Earth.....	Earth.....	Earth.....
Total storage, acre-feet.....	48,000.....	19,600.....	15,100.....
Flood control storage, acre-feet.....	48,000.....	19,600.....	14,700.....
Recreation, acre-feet.....			400.....

Revocation of French Creek Reservoir authorization is also recommended.

*Estimated cost (price level of May 1960).—*

	Union City	Muddy Creek	Woodcock Creek	Total
Federal.....	\$8, 596, 000	\$7, 110, 000	\$7, 396, 000	\$23, 102, 000

*Project economics.—*

	Union City	Muddy Creek	Woodcock Creek	Total
<b>Annual charges:</b>				
Interest and amortization.....	\$324, 500	\$268, 600	\$263, 800	\$856, 900
Maintenance and operation.....	9, 600	11, 000	30, 500	51, 100
Loss of land productivity (economic cost).....	1, 900	1, 400	700	4, 000
Total.....	336, 000	281, 000	295, 000	912, 000
<b>Annual benefits:</b>				
Flood damages prevented.....	822, 000	302, 000	279, 000	1, 403, 000
Recreation.....			65, 000	65, 000
Total.....	822, 000	302, 000	344, 000	1, 468, 000
Benefit-cost ratio.....	2. 4	1. 07	1. 17	1. 6

*Local cooperation.*—Annually inform local interests that the project reservoirs do not provide protection against maximum floods. Local interests are willing to comply with requirement of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: No objection.

Department of Health, Education, and Welfare: No objection.

Federal Power Commission: No objection.

Commonwealth of Pennsylvania: Favorable.

*Comments of the Bureau of the Budget.*—No objection to submission of report to Congress. However, it would expect that, prior to a request for funds to initiate construction of the Woodcock Creek project, the Corps of Engineers would review the economic evaluation of this project in light of the water resource evaluation standards adopted by the administration.

**SALINE RIVER, ILL.**

The plan of improvement recommended by the Chief of Engineers (H. Doc. 316, 84th Cong.) provides for channel improvements by clearing and enlargement of Saline River, and the North, Middle, and South Forks.

*Estimated cost (June 1956 prices).—*

Federal.....	\$5, 272, 000
Non-Federal.....	1, 346, 000

*Project economics.—*

Annual charges.....	\$286, 000
Annual benefits.....	386, 000
Benefit-cost ratio.....	1. 35

*Local cooperation.*—The local requirements, as authorized, are that local interests will furnish lands, easements, and rights-of-way; hold and save; replace highway bridges and make required alterations; maintain and operate; contribute, in cash, 15 percent of the Federal cost of construction estimated at \$930,000.

*Remarks.*—The committee notes that the contribution in the project document report was required based on policy prevailing at that time. However, the current policy of the Chief of Engineers does not require a contribution for higher land use because of the reduction in the flood hazard unless the benefit is of a windfall nature, which is not true in this case. The committee notes also that the project work will affect areas designated for economic redevelopment. In view of these factors, the committee finds that a cash contribution for the flood-control improvements should not be required.

#### ILLINOIS RIVER AND TRIBUTARIES

(H. Doc. 472, 87th Cong.)

*Location.*—The Illinois River Basin is located in portions of Illinois, Wisconsin, and Indiana.

*Authority.*—Resolutions adopted by the Committee on Flood Control of the House of Representatives, United States, one on July 28, 1937, and one on May 14, 1941; and in review of reports in response to an authorization contained in section 6 of the Flood Control Act approved August 11, 1939.

*Existing project.*—Federal improvements in that part of the basin under consideration include 53 authorized flood control projects, of which 34 local protection projects are completed, 1 is under construction, and 18, including Chandlerville No. 2 Reservoir on Sangamon River, have not been started; and the Illinois Waterway for navigation, which provides for a channel 9 feet deep over varying widths between Lake Michigan and the Mississippi River by means of 8 locks and 7 dams. Also, the former Chautauqua Drainage and Levee District has been converted to a wildlife refuge and is operated by the U.S. Fish and Wildlife Service.

*Water resources problems.*—Flood problems in the basin are caused by inadequate channel capacities and, in some cases, by encroachment on the stream-carrying capacity by bridges and other structures. The sources of municipal and industrial water supply in the basin are wells, streams, and reservoirs. Increasing demands are causing depletion and imposition of limited usage.

*Recommended plan of improvement.*—Consists of a multiple-purpose dam and reservoir at Oakley and associated downstream channel improvement project, enlargement of existing levees and/or new levees and floodwalls and channel improvement for protection of 3 urban and 13 agricultural areas, remedial work at the mouth of the Sangamon River, at a Federal construction cost of \$71,465,000, the net cost to the United States is \$66,866,000 after reimbursement by non-Federal interests of the costs allocated to water supply. For deauthorization of the following projects authorized in the 1936 Flood Control Act: (a) Sangamon River, mouth of Salt Creek to Roby, Ill.; (b) Sangamon River and Salt Creek (Sangamon River portion only); (c) Clear Lake levee at junction of Sangamon and Illinois Rivers, Ill.; and (d) McGee Creek Drainage and Levee District, Illinois



River. The recommendation also provides that construction of any one project may be undertaken independently of the others upon compliance with the prescribed requirements of local cooperation pertaining thereto.

*Estimated cost (price level of March 1961).—*

	Oakley Dam and Reservoir	Local protection projects and mouth of Sangamon River
Federal .....	\$29,621,000	\$41,844,000
Non-Federal.....	(1)	4,091,000
Total.....	29,621,000	45,935,000

<sup>1</sup> \$4,599,000 to be reimbursed by local interests for water supply.

*Project economics (in thousands of dollars, March 1961 prices).—*

Project	Total cost	Total annual charges	Total annual benefits	Benefit-cost ratio
Oakley Reservoir and channel improvement...	\$29,621	\$1,388.0	\$1,624.0	1.2
Peoria, Ill.....	13,686	581.0	588.0	1.01
Meredosia, Ill., and Meredosia, Willow Creek, and Coon Run Drainage and Levee Districts.....	2,338	95.2	121.7	1.3
Eldred, Ill.....	554	21.4	40.3	1.9
Indian Creek area.....	3,851	153.4	173.4	1.1
Meredosia Lake and Willow Creek Drainage and Levee District.....	1,615	60.9	66.6	1.1
McGee Creek Drainage and Levee District.....	3,486	136.0	160.0	1.2
Scott County Drainage and Levee District.....	2,920	112.8	140.0	1.2
Big Swan Drainage and Levee District.....	2,513	96.9	130.0	1.3
Hillview Drainage and Levee District.....	2,148	82.2	127.1	1.5
Hartwell Drainage and Levee District.....	2,177	82.9	95.4	1.2
Keach Drainage and Levee District.....	1,907	72.9	78.8	1.1
Eldred and Spankey Drainage and Levee District.....	2,415	92.3	169.1	1.8
Nutwood Drainage and Levee District.....	1,652	63.1	104.2	1.7
Lake Fork of Salt Creek (Sangamon River).....	1,516	76.6	116.4	1.5
Farmers Drainage and Levee District.....	785	34.7	70.2	2.0
Clear Lake Special Drainage District.....	2,334	114.3	139.8	1.2
Remedial work near mouth of Sangamon River.....	38	1.9		
Total.....	75,556			1.2

#### *Local cooperation.—*

(a) Oakley Reservoir project: Agree to pay the first cost allocated to water supply, such cost being presently estimated at 15.5 percent of the total, or \$4,599,000, with such modification in these amounts as may be necessary to reflect adjustments in the storage capacity for water supply and other purposes, to be paid in a lump sum prior to construction with appropriate adjustments when actual costs are determined, or in installments prior to commencement of pertinent items, in accordance with construction schedules as required by the Chief of Engineers, or by annual payments, including interest during construction and interest on the unpaid balance, over the life of the project as determined by the Chief of Engineers, or 50 years, whichever is the lesser; agree to pay annually as they occur the costs of operation and maintenance allocated to water supply, such costs being presently estimated at 22.7 percent of the total, or \$43,000, with such modification in these amounts as may be necessary to reflect adjustments in the storage capacity for water supply and other purposes; maintain all

roads and bridges in the reservoir area and over the improved channel downstream from the dam in accordance with regulations prescribed by the Secretary of the Army; hold and save the United States free from all water-rights claims resulting from construction and operation of the project, and operate the existing non-Federal dam and reservoir at Lake Decatur for flood control in accordance with regulations approved by the Secretary of the Army.

(b) Local protection projects: Furnish without cost to the United States all lands, easements, rights-of-way, and ponding and spoil-disposal areas necessary for construction of the project; hold and save the United States free from damages due to the construction works; bear the expense of relocating and altering highways, highway bridges (except underpinning), utilities, buildings, interior drainage facilities, pipelines, and other structures, except railroad bridges and approaches; prescribe and enforce regulations satisfactory to the Secretary of the Army to prevent encroachment on the improved channels and ponding areas; and maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

Department of Commerce: Favorable.

Federal Power Commission: Favorable.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

#### REND LAKE, ILL.

(H. Doc. 541, 87th Cong.)

*Location.—*Southern Illinois about 5 miles from Benton, Ill.

*Authority.—*House Public Works Committee, July 6, 1949.

*Existing project.—*None.

*Water resources problem.—*(a) Flooding: Storms with heavy rainfall occur most frequently during spring and early summer. The flood of May 1961 was the largest of the six major floods which have occurred in the basin since 1915. Maximum discharge at Benton was 35,800 cubic feet per second. About 103,400 acres of bottom land along Big Muddy River below the proposed Rend Lake damsite, at mile 103.7, are subject to flooding. The average annual damage is estimated at about \$157,000 of which \$57,000 is crop damage and \$100,000, property damage.

(b) Water supply: Municipal and industrial water is presently obtained from wells or surface impoundments. Seasonal fluctuations and extended drought periods seriously deplete water supplies. With allowances for existing water-supply facilities, it is estimated that the net increase in water demand by 2010 within 25 miles of Benton will be about 40 million gallons per day.

(c) Stream pollution: It is anticipated that, under State law, municipalities will take proper measures to correct the general pollution problem for normal stream-flow conditions. However, low-flow augmentation is desirable during drought periods when there may be little or no flow in the river.



*Recommended plan of improvement.*—The most feasible plan of development would consist of a rolled-earth dam on Big Muddy River at mile 103.7. The dam would be 42 feet high above the flood plain with a reinforced concrete spillway and an auxiliary earth spillway located in the east abutment. The combined length of dam and spillway would be 8,900 feet. Outlet works through the earth section of the dam would consist of two 6-foot by 6-foot sluices for regulation of the pool under normal operating conditions and drawdown of the pool. The reservoir would have a capacity of 302,500 acre-feet consisting of 111,500 for flood control, 109,000 for water supply, 57,000 for pollution abatement, and 25,000 for siltation. As an adjunct to the project, two small impoundments would be provided on two of the upper arms of the reservoir for wildlife conservation.

*First costs.*—Federal, \$35,500,000.<sup>1</sup>

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$838, 000	\$297, 000	\$1, 135, 000
Maintenance and operation including major replacements.....	79, 000	9, 000	88, 000
Total.....	917, 000	306, 000	1, 223, 000
Annual benefits:			
Damages prevented.....			216, 000
Recreation.....			536, 000
Water supply.....			301, 000
Area redevelopment.....			285, 000
Pollution abatement.....			61, 000
Fish and wildlife conservation.....			312, 000
(Added transportation costs).....			36, 000
Total.....			1, 675, 000

*Benefit-cost ratio.*—1.4.

*Local cooperation.*—(a) Hold and save the United States free from damages for any water-rights claims resulting from construction and operation of the project;

(b) Reimburse the United States in accordance with the Water Supply Act of 1958, as amended, the first costs and the annual operation and maintenance costs allocated to municipal and industrial water-supply storage, tentatively estimated at \$6,031,000 and \$8,800, respectively for the ultimate development.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Public Health Service: Favorable.

Federal Power Commission. Favorable.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

<sup>1</sup> \$6,031,000 to be repaid by local interests for water supply.



## MISSISSIPPI RIVER AT GUTTENBERG, IOWA

(H. Doc. No. 286, 87th Cong., 2d sess.)

*Location.*—Guttenberg is in northeastern Iowa on the right bank of the Mississippi River.

*Authority.*—Two resolutions of the House Committee on Flood Control, both adopted September 18, 1944.

*Existing project.*—No existing Federal flood control project at Guttenberg. Lock and dam No. 10 of upper Mississippi River navigation project is at Guttenberg. Local interests have constructed some local flood protection measures.

*Flood problems.*—Periodic high Mississippi River stages particularly in 1951 and 1952 have resulted in large expenditures for flood fighting purposes and have caused extensive flood damages in the area.

*Recommended plan of improvement.*—A north levee about 3,040 feet long, a south levee about 2,000 feet long, a pumping plant, and appurtenant works.

*Estimated cost (price level of January 1960).—*

Federal.....	\$729, 000
Non-Federal.....	84, 000
Total.....	813, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$26, 800	\$4, 330	\$31, 130
Maintenance and operation.....		1, 670	1, 670
Total.....	26, 800	6, 000	32, 800
Annual benefits: Damages prevented.....			38, 700

*Benefit-cost ratio.*—1.2.

*Local cooperation.*—Provide all lands, easements, and rights-of-way necessary for the construction of the project; hold and save the United States free from damages due to the construction works; maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; make any necessary alterations to utilities, culverts for interior drainage, roads, and highways including necessary widening of levees to provide for roadways where required, and provision of the necessary freeboard on streets and alley portions if and when needed; and obtain appropriate legal control over pondage areas and prevent encroachment in such areas until substitute areas or equivalent pump or outlet capacity have been provided.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

State of Iowa: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## MISSISSIPPI RIVER BETWEEN STE. GENEVIEVE AND ST. MARYS, MO.

(H. Doc. 519, 87th Cong.)

*Location.*—States of Missouri and Illinois along right bank of Mississippi River between river miles 110.5 and 123.0 above the mouth of the Ohio River.

*Authority.*—Resolution of the Committee on Flood Control, House of Representatives, adopted July 3, 1945.

*Existing project.*—The 1936 Flood Control Act authorized raising the existing levee of the Ste. Genevieve Levee District No. 1. No work was done under this authority. The 1944 Flood Control Act authorized inclusion of Common Big Field in the project although all at a lesser degree of protection. No work started pending completion of this report. The 1938 Flood Control Act authorized protection of the Kaskaskia Island Drainage and Levee District. Work completed in August 1942. Completed upstream reservoirs reduce stages about 1.4 feet.

*Flood problem.*—Approximately 90 percent of the 17,840 acres in the area under consideration are subject to frequent flooding by the Mississippi River, Saline River, and River aux Vases. The land is primarily agricultural.

*Recommended plan of improvement.*—Raise the existing Kaskaskia Island Drainage and Levee District levee about 5 feet above its present height of about 13 feet. This would be raised to the design grade established and approved for Mississippi River agricultural levees in 1944.

*Estimated cost (price level of January 1961).*—

Federal.....	\$2, 500, 000
Non-Federal.....	110, 000
Total.....	2, 610, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$95, 000	\$4, 900	\$99, 900
Maintenance and operation.....		2, 700	2, 700
Loss of productivity.....		1, 300	1, 300
Total.....	95, 000	8, 900	103, 900
Annual benefits: Damages prevented.....			113, 500

*Benefit-cost ratio.*—1.1.

*Local cooperation.*—(a) Provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project; (b) hold and save the United States free from damages due to the construction works; and (c) maintain and operate the project after completion in accordance with regulations prescribed by the Secretary of the Army.

*Comments of the State and Federal agencies.*—

State of Missouri: Favorable.

State of Illinois: Favorable.

Department of Interior: Favorable.

Department of Agriculture: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

HARRISONVILLE AND IVY LANDING DRAINAGE AND LEVEE DISTRICT NO. 2,  
ILLINOIS

(H. Doc. 542, 87th Cong.)

*Location.*—Harrisonville and Ivy Landing Drainage and Levee District No. 2, including Moredock and Ivy Landing Drainage District No. 1, lies in the Mississippi River flood plain in Monroe County, Ill., between river miles 141 and 156 above the Ohio River.

*Authority.*—House Public Works Committee Resolution adopted June 17, 1948. Senate Public Works Committee resolution adopted July 18, 1959.

*Existing project.*—The existing Federal project for Harrisonville and Ivy Landing Drainage and Levee District No. 2 provides for raising and enlarging 21.4 miles of riverfront and flank levee and constructing appurtenant works, including eight gravity drainage structures. Construction of the work was completed in 1957.

*Flood problem.*—Although the menace of direct flooding from the Mississippi River has been largely eliminated by levees, there remains the problem of removing impounded interior drainage. The sources of the impounded water are precipitation on the protected lowlands, accumulation of runoff from tributary hill lands, and seepage from the Mississippi River. Most of the accumulated water collects near the middle third and lower end of the district.

*Recommended plan of improvement.*—Provide pumping plants adjacent to the gravity outlets of Maeystown Creek and Fountain Creek. The greatest excess of benefits over costs would be realized with pumping capacities of 600 and 30 cubic feet per second, respectively. Raise the grade of the levee for 1,000 feet on each side of the pumping plants to prevent possible overtopping and crevassing in the immediate vicinities.

*Estimated cost (price level of July 1960).*—

Federal.....	\$1, 112, 000
Non-Federal.....	700
<b>Total.....</b>	<b>1, 112, 700</b>

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....			\$42, 800
Maintenance, operation, and major replacement.....		\$28, 800	28, 800
<b>Total.....</b>		<b>28, 800</b>	<b>71, 600</b>
Annual benefits:			
Damages prevented.....			110, 000
Increased land use.....			36, 500
<b>Total.....</b>			<b>146, 500</b>

*Benefit-cost ratio.*—Maeystown Creek, 2.1; Fountain Creek, 1.7.

*Local cooperation.*—(a) Provide without cost to the United States all lands, easements, and rights-of-way for the construction of the project; (b) hold and save the United States free from damages due to the construction works; (c) maintain and operate the project, in-



cluding the pumping plants, after completion in accordance with regulations prescribed by the Secretary of the Army; and (d) prevent encroachment on improved channels and ponding areas and, if ponding areas and capacities are impaired, provide substitute storage capacity or equivalent pumping capacity promptly without cost to the United States.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### COLUMBIA DRAINAGE AND LEVEE DISTRICT NO. 3, ILLINOIS

(H. Doc. 543, 87th Cong.)

*Location.*—Mississippi River flood plain in Monroe County, Ill., between river miles 156 and 166 above the Ohio River.

*Authority.*—House and Senate Public Works Committee resolutions adopted June 17, 1948, and June 18, 1957, respectively.

*Existing project.*—The existing Federal project for Columbia Drainage and Levee District No. 3 provides for raising and enlarging 20.1 miles of riverfront and flank levee and constructing appurtenant works, including nine gravity-drainage structures. Construction of the work was essentially completed in 1958.

*Flood problem.*—Although the menace of direct flooding from the Mississippi River has been largely eliminated by levees, there remains the problem of removing impounded interior drainage. The sources of the impounded water are precipitation on the protected lowlands, accumulation of runoff from tributary hill lands, and seepage from the Mississippi River. The accumulated water collects near the middle third and lower end of the district. Under ordinary circumstances, this area is drained by Franey Lake ditch, Long slash, Dogwood Slough, and Shehan Lake ditch.

*Recommended plan of improvement.*—The district engineer finds that the most suitable plan for reducing impoundment flooding would be to provide pumping plants adjacent to the outlets of Long slash and Franey Lake ditch. Drainage from Shehan Lake ditch and Dogwood Slough would be diverted to Long slash by ditches 1,300 and 1,200 feet in length. He finds that the greatest excess of benefits over costs would be realized with pumping capacities of 200 and 30 cubic feet per second, respectively. The district engineer proposes to raise the grade of the levee by 2 feet for a distance of 1,000 feet on each side of the pumping stations to prevent possible overtopping and crevassing in the immediate vicinities. Local interests would construct on-farm drainage ditches on about 700 acres of land.

*Estimated cost (price level of January 1961).*—

Federal.....	\$986, 000
Non-Federal.....	6, 000
Total.....	992, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Long slash ditch:			
Interest and amortization.....	\$31,320	\$170	\$31,490
Maintenance and operation.....		7,700	7,700
Major replacement.....		1,660	1,660
Loss of productivity.....		50	50
Total.....	31,320	9,580	40,900
Franey Lake ditch:			
Interest and amortization.....	6,735	85	6,820
Maintenance and operation.....		3,900	3,900
Replacements.....		560	560
Loss of productivity.....		20	20
Total.....	6,735	4,565	11,300
	Long slash ditch	Franey Lake ditch	Total
Annual benefits: Damages prevented.....	\$33,200	\$8,200	\$41,400
	19,700	7,500	27,200
Total.....	52,900	15,700	68,600

*Benefit-cost ratio.*—Long slash ditch, 1.3; Franey Lake Ditch, 1.4.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way for the construction of the project; hold and save the United States free from damage due to the construction works; maintain and operate the project, including the pumping plants, after completion in accordance with regulations prescribed by the Secretary of the Army; and prevent encroachment on improved channels and ponding areas, and, if ponding areas and capacities are impaired, provide substitute storage capacity or equivalent pumping capacity promptly without cost to the United States.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: Favorable.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## PRAIRIE DU PONT LEVEE AND SANITARY DISTRICT, ILL.

(H. Doc. 540, 87th Cong.)

*Location.*—The district lies on the left bank of the Mississippi River between miles 166 and 175 above the mouth of the Ohio River.

*Authority.*—House Public Works Committee, June 17, 1948, and August 20, 1957; Senate Public Works Committee, July 18, 1957.

*Existing project.*—The existing Federal project for Prairie du Pont Levee and Sanitary District provides for raising and enlarging 15.2 miles of riverfront and flank levee and constructing appurtenant works, including nine gravity-drainage structures. The work was scheduled for completion in 1961. Nine main ditches and streams traverse the lowest portions of the area.

*Flood problem.*—Substantial and repetitive damages have occurred due to blocked interior drainage when stages on the Mississippi River

exceeded 15 to 30 feet on the Market Street gage at St. Louis, Mo. Drainage would be blocked at least once almost every year, varying in duration from a few days to a maximum of 147 days. The Palmer Creek drainage area, the largest in the district, is affected by a river stage of 15 feet. Old Prairie du Pont Creek (East) area is affected by a river stage of 20 feet, and the remaining areas are affected by a river stage of 30 feet. Blocked drainage occurs generally during the planting season, March through July.

*Recommended plan of improvement.*—Provide pumping plants adjacent to the outlets of Palmer Creek, Old Prairie du Pont Creek (West), Falling Spring Ditch, and Old Prairie du Pont Creek (East). The greatest excess of benefits over costs would be realized with pumping capacities of 225, 35, 5, and 17 cubic feet per second, respectively. District engineer proposes to raise the grade of the levee by 2 feet for a distance of 1,000 feet on each side of the pumping stations to insure against overtopping in the immediate vicinities.

*Estimated cost (price level of July 1961).*—

Federal.....	\$921, 000
Non-Federal.....	4, 300
Total.....	925, 300

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	(1)	(1)	
Maintenance and operation.....	(1)	\$16, 800	
Total.....			\$52, 100
Annual benefits:			
Damages prevented.....			\$157, 800
Increased land use.....			53, 800
Total.....			211, 600

<sup>1</sup> Breakdown not available.

*Benefit-cost ratio.*—4.1.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way for the construction of the project; hold and save the United States free from damages due to the construction works; maintain and operate the project, including the pumping plants, after completion in accordance with regulations prescribed by the Secretary of the Army; and prevent encroachment on improved channels and ponding areas, and if ponding areas and capacities are impaired, provide substitute storage capacity or equivalent pumping capacity promptly without cost to the United States.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget.*—No objection.



## RICHLAND CREEK, ILL.

(H. Doc. 571, 87th Cong.)

*Location.*—Richland Creek lies in Monroe, St. Clair, and Randolph Counties, in southeastern Illinois.

*Authority.*—Senate Public Works Committee resolutions adopted September 16, 1948, and July 18, 1957, and House Public Works Committee resolution adopted August 20, 1957.

*Existing project.*—None.

*Flood problem.*—The urban area of the city of Belleville has experienced floods with some loss of life. The rural area (reach 3) a mainly agricultural and, being generally flat, floods with accompanying destruction of crops.

*Recommended plan of improvement.*—The district engineer has determined that the plan of improvement which would afford the greatest overall benefit to the Richland Creek Basin would consist of (a) the two detention reservoirs proposed by the Soil Conservation Service; and (b) urban channel improvement of maximum capacity consistent with space limitations through Belleville, including necessary bridge modifications, and clearing, cleaning, and rectification of the existing channel in the rural reach 3 by the Corps of Engineers. These improvements would provide protection against the standard project flood in the urban reach through Belleville and against the 2-year flood in reach 3.

*Estimated cost (price level of January 1961).*—

Federal .....	\$4, 995, 000
Non-Federal .....	574, 000
Total .....	5, 569, 000

*Project economics.*—

Annual charges .....	233, 400
Annual benefits:	
Damages prevented .....	273, 900
Other (enhancement) .....	36, 300
Total .....	310, 200

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—(a) Provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project; (b) provide without cost to the United States all alterations of highways, highway bridges, utilities, and related facilities made necessary by construction of the project; (c) hold and save the United States free from damages due to the construction works; (d) maintain the improved channel after completion in accordance with regulations prescribed by the Secretary of the Army; (e) prevent encroachment on the improved channel; and (f) at least annually inform interests affected that the project will not provide protection in the agricultural reaches against major floods. Local interests are willing to furnish the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: Favorable. Suggest coordination with Soil Conservation Service prior to construction.

State of Illinois: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## JOANNA RESERVOIR, SALT RIVER, MO.

(H. Doc. 507, 87th Cong.)

*Location.*—Salt River rises in Schuyler County, Mo., about 12 miles south of the Missouri-Iowa State line, and flows generally southeast about 192 miles to the Mississippi River near Louisiana, Mo. Joanna Dam would be located on Salt River about 16 miles southwest from Hannibal, Mo.

*Authority.*—Flood Control Act, June 22, 1936.

*Existing project.*—Flood Control Act of 1936 authorized participation with the Riverland Levee District in levee construction adjacent to the mouth of Salt River. The River and Harbor Act of 1937 authorized acquisition of lands damaged by flooding resulting from operation of Mississippi River navigation project. The Flood Control Act of June 28, 1938, authorized the Joanna Dam project in connection with the general comprehensive plan for flood control and other purposes in the upper Mississippi River Basin. A Federal project provides for raising and enlarging approximately 14.6 miles of levee in the Riverland Levee District near the mouth of the river. The levee system, affording partial protection to about 5,800 acres, was built by local interests with Federal assistance. About 2,720 acres of lowlands near the mouth of Salt River, which were damaged by the Mississippi River navigation project, have been acquired by the United States.

*Flood problem.*—Rainstorms cause the streams to rise rapidly. Flow usually returns to bank full within 3 to 4 days.

*Recommended plan of improvement.*—Construction of a dam and pumped power facilities to serve the functions of flood control, power, low-flow augmentation for Mississippi River navigation, water supply, recreation, and fish and wildlife.

*Estimated cost (price level of January 1961).*—Federal, \$63,300,000.<sup>1</sup>

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$2,485,900	\$69,000	\$2,554,900
Maintenance and operation.....	392,400	7,000	399,400
Loss of taxes.....	187,200		187,200
<b>Total.....</b>	<b>3,065,500</b>	<b>76,000</b>	<b>3,141,500</b>
<b>Annual benefits, damages prevented:</b>			
Flood control.....			1,317,500
Navigation.....			3,100
Power.....			1,089,700
Water supply.....			105,000
Fish and wildlife.....			261,500
Recreation.....			1,380,000
<b>Total.....</b>			<b>4,156,800</b>

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Pay \$1,908,000 toward construction costs and \$7,000 annually for operation and maintenance and replacements as allocated to local interests because of water supply.

<sup>1</sup> \$1,908,000 to be repaid by local interests for water supply.

*Comments of States and Federal agencies.—*

State of Missouri: Favorable.

Department of Interior: Favorable.

Department of Agriculture: Favorable.

Federal Power Commission: Favorable.

Department of Health, Education, and Welfare: Favorable.

Department of Commerce: Favorable.

*Comments of the Bureau of the Budget.*—No objection to submission of report to Congress. However, the Bureau of the Budget notes that a substantial proportion of the benefits used to justify the project result from fish and wildlife and general recreation, and that the recently approved administration standards for the formulation and evaluation of water resources projects provide appropriately for the consideration of these purposes. The Bureau states that consideration is currently being given to the problems of cost allocation and of reimbursement and cost sharing between the Federal Government and non-Federal bodies—matters not dealt with fully in the policies and standards recently approved by the President, and that there is also under consideration the development of detailed standards to supplement the new principle for estimating recreation benefits, including those derived from the recreational aspects of fish and wildlife. Accordingly, the Bureau would expect that prior to any requests for funds to initiate construction of this project, it would be reevaluated in the light of the administration's standards and policies applicable at that time.

PECATONICA RIVER, ILL. AND WIS.

(H. Doc. 539, 87th Cong.)

*Location.*—In south-central Wisconsin and north-central Illinois.

*Authority.*—Flood Control Act of 1946.

*Existing project.*—An authorized local protection project at Freeport, Ill.

*Flood problem.*—This basin is subject to flooding during all seasons of the year.

*Recommended plan of improvement.*—Consists of about 6,000 feet of channel improvement, 4,500 feet of levee, 780 feet of concrete flood-wall, three closure structures, a pumping plant, drainage facilities, and modification of a highway bridge.

*Estimated cost (price level).*—

Federal.....	\$850, 000
Non-Federal.....	182, 000
Total.....	1, 032, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$31, 400	\$8, 500	\$39, 900
Maintenance and operation.....		3, 200	3, 200
Total.....	31, 400	11, 700	43, 100
Annual benefits: Damages prevented.....			45, 100



*Benefit-cost ratio.*—1.05.

*Local cooperation.*—Provide all lands, easements, and rights-of-way, including borrow areas and spoil-disposal areas, necessary for the construction of the project; accomplish all relocations and alterations of buildings, utilities, highway bridges, roads, and other facilities necessary for construction of the project; hold and save the United States free from damages due to the construction works; maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; prevent any encroachment on the flood channels and ponding areas which would decrease the effectiveness of the flood control improvements, and if ponding areas and capacities are impaired, promptly provide substitute storage capacity or equivalent pumping capacity; and at least annually notify those affected that the project will not provide complete flood protection.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

State of Illinois: Favorable.

State of Wisconsin: Favorable.

*Comments of Bureau of the Budget.*—No objection.

MISSISSIPPI RIVER URBAN AREAS FROM HAMPTON, ILL., TO CASSVILLE, WIS.

(H. Doc. 450, 87th Cong.)

*Location.*—The reach of the Mississippi River from Hampton, Ill., mile 491.8 to the vicinity of Cassville, Wis., mile 606.7, above the mouth of the Ohio River.

*Authority.*—This interim report is in partial response to two resolutions adopted September 18, 1944, by the Committee on Flood Control of the House of Representatives.

*Existing project.*—The only existing Corps of Engineers local flood control project in this reach is a levee with appurtenant works to protect the town of Sabula, Iowa. Construction was completed in November 1957 at a Federal cost of \$411,915.

*Flood problem.*—The flood plain in the reach of the Mississippi River considered in this report contains 17 urban areas. The problem is the reoccurring flood damage in these urban areas. Ten major floods of record occurred during the period 1880 to 1954. Average annual flood damages under present conditions of development at the communities investigated are estimated at \$1,336,800, of which 90 percent are at Dubuque and Clinton.

*Recommended plan of improvement.*—The plan provides for improvements for flood control at Dubuque, Iowa, consisting of levees, floodwalls, and appurtenant works, including a navigation opening at the mouth of Dubuque Harbor.

*Estimated cost (price level, July 1959).*—

Federal	\$5, 350, 000
Non-Federal	150, 000
Total	5, 500, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$200,900	\$7,350	\$208,250
Maintenance and operation.....		12,750	12,750
Total.....	200,900	20,100	221,000
Annual benefits: Damages prevented.....			291,400

*Benefit-cost ratio.*—1.3.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way necessary for the construction of the project; hold and save the United States free from damages due to the construction works; maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; modify or relocate buildings, utilities, sewers, and other facilities where necessary in the construction of the project, including necessary widening of levees to provide for roadways; and obtain legal control over pondage areas and prevent encroachment until substitute pondage or increased pumping capacity has been provided at local expense. Officials of the city of Dubuque have indicated their willingness to comply with items of local cooperation.

*Comments of the States and Federal agencies.*—

State of Illinois: Favorable.

State of Iowa: Favorable.

Department of Interior: Favorable.

Department of Agriculture: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## KICKAPOO RIVER, WIS.

(H. Doc. 557, 87th Cong.)

*Location.*—The Kickapoo River rises in Monroe County, in southwestern Wisconsin, and flows south and southwest through Vernon, Richland, and Crawford Counties, and empties into the Wisconsin River near Wauzeka, about 16 miles upstream from the junction of the latter stream with the Mississippi River.

*Authority.*—Section 6 of the Flood Control Act of June 22, 1936, as amended by section 5 of the Flood Control Act approved August 28, 1937.

*Existing project.*—There are no existing flood-control projects in the river basin. The Soil Conservation Service has constructed two runoff retarding dams on the headwaters of the west branch of the Kickapoo River under the pilot watershed program.

*Flood problem.*—The Kickapoo Valley is subject to a destructive flood practically every year. About 13,000 acres of agricultural lands and 8 urban areas below La Farge sustain damage during major floods. Average annual damages are \$765,000, of which approximately 50 percent are urban. Recurrence of the July 1951 flood would cause damages totaling \$1,900,000.

*Recommended plan of improvement.*—A dam and reservoir on Kickapoo River, about 1 mile upstream from the village of La Farge, operated for flood control, fish and wildlife conservation, general

recreation, and a reduction in aggradation downstream from the reservoir. The reservoir would have a total capacity of 75,000 acre-feet at the maximum pool of the spillway design flood, 66,000 acre-feet for the reservoir design flood, and 10,250 acre-feet for the conservation pool. About 14.5 miles of channel enlargement would be required for suitable operation of the reservoir. Supplemental flood protection would be provided at Soldiers Grove by the construction of a levee extending along the right bank about 3,200 feet long and a levee on the left bank about 2,800 feet. A short levee embankment about 70 feet long would be provided at the upstream end of the former railroad cut near the north limits of the village. Interior drainage would be pumped. Two bridges would be raised, and the channel enlarged near the bridges. Supplemental flood protection would be provided at Gays Mills by construction of a levee on the left bank of about 6,000-foot length which would surround the built-up portion of Gays Mills on three sides. Interior drainage would be ponded and pumped. The highway bridge would be raised and the channel would be enlarged.

*Estimated cost (price level of December 1960).—*

	La Farge Dam and Reservoir	Soldiers Grove levee	Gays Mills levee	Total
Federal.....	\$14,894,000	\$271,000	\$405,000	\$15,570,000
Non-Federal.....	0	190,000	142,000	332,000
Total.....	14,894,000	461,000	547,000	15,902,000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
La Farge Reservoir.....	\$484,800		\$484,800
Soldiers Grove levees.....	7,900	\$9,200	17,100
Gays Mills levee.....	11,700	7,800	19,500
Total.....	504,400	17,000	521,400

  

	Flood control	General recreation	Fish and wildlife	Total
Annual benefits:				
La Farge Reservoir.....	\$488,100	\$112,800	\$11,000	\$611,900
Soldiers Grove levees.....	22,000			22,000
Gays Mills levee.....	32,400			32,400
Total.....	542,500	112,800	11,000	666,300

*Benefit-cost ratio.*—La Farge Reservoir, 1.3; Soldiers Grove levees, 1.3; Gays Mills levee, 1.7; overall, 1.3.

*Local cooperation.*—Prior to construction of levees at Soldiers Grove and Gays Mills, local interests agree to provide all lands, easements, and rights-of-way necessary for construction of the project; hold and save the United States free from damages due to the construction works; maintain and operate each usable element of the work after completion, and all of the works after completion thereof



in accordance with regulations prescribed by the Secretary of the Army; make all necessary relocations of buildings, utilities, highway bridges, sewers, roads, and other structures required in connection with the work; and prevent encroachments on improved channels, floodways, and ponding areas unless and until substitute storage capacity or equivalent pumping capacity is provided without cost to the United States. Local interests have indicated willingness and ability to furnish required cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Wisconsin: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

WARROAD RIVER AND BULL DOG CREEK, MINN.

(H. Doc. 449, 87th Cong.)

*Location.*—In north-central Minnesota near the international boundary. Warroad River flows into Lake of the Woods, a boundary lake which is a part of the Hudson Bay drainage system. Bull Dog Creek is a principal tributary of Warroad River.

*Authority.*—Flood Control Act approved December 22, 1944.

*Existing project.*—No existing Federal project for flood control. Local interests have constructed numerous drainage ditches throughout the basin.

*Flood problem.*—Agricultural development is greatly hampered by flooding.

*Recommended plan of improvement.*—Construction of 34 miles of channel improvement along Warroad River, East Branch, Bull Dog Creek, County Ditch No. 10, and County Ditch No. 6, and appurtenant works.

*Estimated cost (price level of April 1960).—*

Federal.....	\$972, 000
Non-Federal.....	367, 000
Total.....	1, 339, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$36, 500	\$17, 600	\$54, 100
Maintenance and operation.....		6, 800	6, 800
Total.....	36, 500	24, 400	60, 900
Annual benefits:			
Flood damages prevented.....			79, 500
Increased land use.....			22, 200
Total.....			101, 700

*Benefit-cost ratio.*—1.7.

*Local cooperation.*—Contribute in cash or equivalent construction work 9.9 percent of the gross Federal construction cost (exclusive of county ditch No. 6), an amount presently estimated at \$93,000, to be paid either in a lump sum prior to start of construction, or in installments prior to start of pertinent work items in accordance with construction schedules as required by the Chief of Engineers, the final contribution to be determined after actual costs are known; provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project including changes to highway channel crossings and miscellaneous utilities; hold and save the United States free from damages due to the construction works; maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; prevent encroachment on the proposed rights-of-way and improved channels; provide an organization capable of furnishing the required local cooperation; and construct and maintain the associated drainage works needed to effectively use the improved outlet system. It is considered that local interests are financially able and willing to meet all conditions of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

State of Minnesota: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### RIVER ROUGE, MICH.

(H. Doc. 148, 87th Cong.)

*Location.*—The River Rouge Basin is located in the southeastern corner of the lower peninsula of the State of Michigan and lies within the counties of Wayne, Oakland, and Washtenaw. The basin is fan shaped and extends about 24 miles from north to south and about 33 miles from east to west.

*Authority.*—Flood Control Act approved June 30, 1948.

*Existing project.*—None.

*Flood problem.*—An investigation of the flood problems of the River Rouge and its tributaries indicates that the reaches upstream of Michigan Avenue experience annual flooding. The flood of April 1947, the largest of record, inundated the utility tunnels of the Ford Motor Co. plant, employing 40,000 persons, and caused complete shutdown of the plant. Average annual flood damages in the reach below Michigan Avenue, adjusted for future conditions, are estimated at \$853,000.

*Recommended plan of improvement.*—Improvement of River Rouge, Mich., for flood control, by channel straightening and enlargement from Michigan Avenue to the navigation turning basin.

*Estimated cost (price level, December 1959).*—

Federal	\$8, 659, 000
Non-Federal	10, 877, 300
Total	19, 536, 300

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$314,200	\$421,700	\$735,900
Maintenance and operation.....	0	25,000	25,000
Total.....	314,200	446,700	760,900
Annual benefits:			
Damages prevented.....			820,600
Other: Savings to local interests in future sewer constructions.....			98,700
Total.....			919,300

*Benefit-cost ratio.—1.2.*

*Local cooperation.*—(a) Furnish without cost to the United States all lands, easements, rights-of-way, and suitable spoil-disposal areas necessary for construction of the project; (b) hold and save the United States free from damages due to the construction works; (c) maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; (d) prescribe and enforce regulations satisfactory to the Secretary of the Army designed to prevent encroachments on the proposed rights-of-way and the improved channel, and to keep non-pile-supported bank loads a minimum distance of 50 feet from the top of the bank; (e) construct new highway bridges as required; and (f) make all alterations and additions to highway bridges, utility crossings, sewer outlets, and interfering structures within the proposed channel rights-of-way. Local interests have indicated ability and willingness to furnish requirements.

*Comments of the State and Federal agencies.—*

Department of the Interior: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of Michigan: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

## SANDUSKY RIVER, OHIO

(S. Doc. 136, 87th Cong.)

*Location.*—The Sandusky River is located in north-central Ohio. The river rises in Richland County, flows generally northwestward, and empties in the western end of Sandusky Bay, an arm of Lake Erie, about 70 miles west of Cleveland.

*Authority.*—Partial response to a resolution by the Committee on Public Works of the U.S. Senate adopted on February 24, 1948.

*Existing project.*—There are no existing Federal improvements for flood control in the basin.

*Flood problem.*—Flood problems in the Sandusky River Basin are due principally to development of flood-plain areas without provision of alternate routes in floodflows. The channel is not sufficiently large to contain high discharges, and ice jams which frequently form on the lower portions of the river result in high stages at Fremont.



*Recommended plan of improvement.*—Provides for channel widening, deepening, and straightening together with levees, floodwalls, and appurtenant works at Fremont, Ohio.

*Estimated cost (price level, March 1961).*—

Federal.....	\$4, 300, 000
Non-Federal.....	490, 000
Total.....	4, 790, 000

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$127, 300	\$20, 800	\$148, 100
Maintenance and operation.....		14, 000	14, 000
Surveys and inspection.....	200		200
Total.....	127, 500	34, 800	162, 300
Annual benefits: Damages prevented.....			283, 500

*Benefit-cost ratio.*—1.7.

*Local cooperation.*—Provide without cost to the United States all lands, easements, and rights-of-way, including borrow and sump areas, necessary for construction of the project; hold and save the United States free from damages due to the construction works; accomplish all relocations and alterations of streets, buildings, pipelines, utilities, bridges, and other structures (except railroad facilities) made necessary by the construction work; maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; prescribe and enforce regulations to prevent encroachment on channels, rights-of-ways, and ponding areas necessary to proper functioning of the project; and at least annually inform interests affected that the proposed improvements will not provide protection against floods of a magnitude equivalent to that of March 1913. Local interests have indicated willingness and ability to furnish local cooperation.

*Comments of the State and Federal agencies.*—

Department of Interior: Favorable.

Department of Agriculture: Favorable.

State of Ohio: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### TRUCKEE RIVER AND TRIBUTARIES, CALIFORNIA AND NEVADA

(H. Doc. 435, 87th Cong.)

*Location.*—The Truckee River Basin, in northeastern California and western Nevada, originates at the outlet of Lake Tahoe, flows for 110 miles generally north and east, and terminates in Pyramid Lake, Nev.

*Authority.*—1938 Flood Control Act.

*Existing project.*—Existing flood control improvements by the Corps of Engineers consist of channel clearing and snagging through the city of Reno upstream to the California-Nevada State line. Enlargement of the outlet channel at Lake Tahoe and 7.5 miles of channel improvements downstream from Reno are under construction.

Bureau of Reclamation improvements include controlled storage in Lake Tahoe for irrigation and power, completed in 1915; the Boca Reservoir, completed in 1939, on Little Truckee River for irrigation; and the authorized multiple-purpose reservoirs at the Stampede site on Little Truckee River and the Prosser Creek site.

*Flood problem.*—Floods caused by rainfall from November through March and characterized by high peaks and short durations result in extensive damages, particularly at Reno and vicinity, to expensive hotels, industrial and commercial firms, offices, and residences. The flood problem is aggravated by bedload deposition in the channel and by large amounts of drift which collect at the street bridges.

*Recommended plan of improvement.*—A 15,000-acre-foot reservoir for flood control at the Martis Creek site about 32 miles upstream from Reno, together with channel improvements in Reno.

*Estimated cost (1959 price level).*—

Federal.....	\$2, 385, 000
Non-Federal.....	75, 000
<b>Total.....</b>	<b>2, 460, 000</b>

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$89, 000	\$3, 500	\$92, 500
Maintenance and operation.....	14, 000	12, 000	26, 000
<b>Total.....</b>	<b>103, 000</b>	<b>15, 500</b>	<b>118, 500</b>
Annual benefits: Damages prevented.....			164, 600

*Benefit-cost ratio.*—1.4.

*Local cooperation.*—Provide a channel capacity of 14,000 cubic feet per second in Truckee River through Reno, including necessary modifications and relocations of existing structures and facilities; maintain the channel through Reno to preserve the channel capacity of 14,000 cubic feet per second; prevent encroachment in the channel; maintain the channel between Reno and the California Nevada State line clear of all debris and drift; and adequately inform interests affected that the project does not provide protection against maximum floods. They have indicated willingness to meet the requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Makes several comments including that of the Fish and Wildlife Service which is concerned about the passage of fish upstream through the ungated outlet works. The Chief of Engineers has replied to the Secretary of the Interior that appropriate consideration will be given to the views of the Department during the planning stage and after construction, if the project is authorized by Congress.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

Federal Power Commission: Favorable.

Public Health Service: Favorable.

State of Nevada: Favorable.

State of California: Makes several comments including that

further consideration be given to including a gated outlet works for conservation use. The Chief of Engineers has replied indicating that full consideration will be given to the views of the State after construction, if the project is authorized by Congress. *Comments of the Bureau of the Budget.*—No objection.

## ALAMEDA CREEK, CALIF.

(S. Doc. 128, 87th Cong.)

*Location.*—Alameda Creek rises in Santa Clara County and flows generally westward to enter the southern arm of San Francisco Bay.

*Authority.*—Senate Public Works Committee resolutions adopted April 15, 1949, and June 17, 1949.

*Existing project.*—There is no existing Federal project.

*Flood problem.*—The flood problem consists of overbank flooding in the Coastal Plain area and Livermore Valley, erosion and inundation in Niles Canyon, and inadequate drainage in Livermore Valley.

*Recommended plan of improvement.*—Channel improvements and levees for the Coastal Plain and Federal participation in the multiple-purpose Del Valle Dam and Reservoir to be constructed by the State of California.

*Estimated cost (price level of December 1960).*—

	Del Valle Reservoir	Coastal Plain	Total
Federal.....	<sup>1</sup> \$4,070,000	\$10,610,000	\$14,680,000
Non-Federal.....	8,300,000	2,400,000	10,700,000
Total.....	12,370,000	13,010,000	25,380,000

<sup>1</sup> Consists of \$3,800,000 cash contribution to the State and \$270,000 for Federal cost of engineering, design supervision, and administration.

*Project economics.*—

	Del Valle Reservoir (Federal participation for flood control)		
	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$148,200	\$500	\$148,700
Maintenance and operation.....	<sup>1</sup> 28,000	0	28,000
Total.....	176,200	500	176,700

<sup>1</sup> Present worth of \$776,000 to be paid in lump sum to State.



	Coastal Plain improvements		Total
	Federal	Non-Federal	
Annual charges:			
Interest and amortization.....	\$458,000	\$144,000	\$602,000
Maintenance and operation.....		132,000	132,000
Loss of land productivity.....		15,000	15,000
Total.....	458,000	291,000	749,000
		Del Valle Reservoir	Coastal Plain improvements
Annual benefits: Damages prevented.....		\$240,000	\$1,680,000

*Benefit-cost ratio.*—Del Valle Reservoir 1.4; coastal plain 2.2.

*Local cooperation.*—(a) Coastal plain improvements: Provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project; hold and save the United States free from damages due to the construction works; relocate all highway bridges, and approaches thereto, and utilities necessary for the construction and maintenance of the project; maintain and operate the completed works; prevent any encroachment on flood channels and ponding areas which would decrease the effectiveness of the project for flood control; and adjust all claims regarding water rights which might be affected by the project.

(b) Del Valle Reservoir (Federal participation for flood control): Provided that prior to making any contribution an agreement be made that operation of project for flood control will provide the benefits and will be operated in accordance with rules and regulations prescribed by the Secretary of the Army, Federal monetary contributions be administered where it does not exceed 30.7 percent of construction cost and that the total Federal contributions toward the cost of the Del Valle project not exceed \$4,080,000, design and construct project subject to review and approval by Chief of Engineers, prevent encroachment, adjust all claims regarding water rights, and hold and save. Local interests have indicated willingness to furnish requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of California: The State in commenting on the report stated that it could not concur in the concept of deducting from the Federal share of the project costs, the non-Federal hypothetical and relocation savings in the coastal plain. After due consideration, the Chief of Engineers concluded that the benefits are widespread and should be borne by the Federal Government.

*Comments of the Bureau of the Budget.*—No objection.

## CORTE MADERA CREEK, MARIN COUNTY, CALIF.

(H. Doc. 545, 87th Cong.)

*Location.*—Corte Madera Creek and its tributaries drain an area of about 29 square miles in Marin County, Calif., on the west side of San Francisco Bay.

*Authority.*—1944 Flood Control Act.

*Existing project.*—There is no existing Federal project. Local interests have constructed noncontinuous bank protection works and Phoenix Lake Reservoir on Ross Creek for water supply.

*Flood problems.*—Floods in the basin result from winter rains, and are of short duration. Major flood problems arise from inadequate channel capacities and unstable bank conditions.

*Recommended plan of improvement.*—Channel improvements on Corte Madera, San Anselmo, Sleepy Hollow, Tamalpais, Unnamed, and Fairfax Creeks. Improvements include channel enlargement, concrete lining, levees, and debris removal, and provide for interior drainage of protected areas and for improved fish migration and spawning conditions.

*Estimated cost (1961 price level).*—

Federal.....	<sup>1</sup> \$5, 692, 000
Non-Federal.....	1, 180, 000
Total.....	6, 872, 000

<sup>1</sup> Excludes \$78,000 for preauthorization studies.

*Project economics.*—

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$216, 200	\$57, 800	\$274, 000
Maintenance and operation.....		26, 200	26, 200
Loss of land productivity.....		5, 800	5, 800
Total.....	216, 200	89, 800	306, 000
Annual benefits:			
Flood damages prevented.....			310, 000
Erosion damages prevented.....			60, 000
Saving in cost of bank protection.....			26, 000
Land enhancement.....			27, 000
Total.....			423, 000

*Benefit-cost ratio.*—1.4.

*Local cooperation.*—Provide lands, easements, and rights-of-way needed, including the modification of bridges and utilities; hold and save the United States free from damage due to the works; maintain and operate the project, including prevention of encroachments; and adjust all claims for water rights. Local interests have indicated willingness to furnish requirements of local cooperation.

*Comments of the State and Federal Agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Public Health Service: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.*—No objection. However, the Bureau would recommend that authorization of the project be

subject to a local cash contribution of at least 50 percent of that part of the project cost associated with land enhancement resulting from creation of new and usable land out of tidal marsh by placement of dredged material.

*Remarks.*—The Secretary of the Army recommends the improvement as proposed by the Chief of Engineers subject to the additional requirement that local interests contribute in cash 3 percent of the Federal construction cost of the Ross Valley unit, an amount presently estimated at \$158,000. With this change, the net Federal cost for construction is estimated at \$5,534,000, which has been accepted by the committee.

#### NEW MELONES PROJECT, STANISLAUS RIVER, CALIF.

(H. Doc. 453, 87th Cong.)

*Location.*—The Stanislaus River rises on the western slope of the Sierra Nevada Mountains and enters the lower San Joaquin River south of Stockton, Calif.

*Authority.*—House Public Works Committee resolution adopted April 12, 1961.

*Existing project.*—The present Federal project, authorized in 1944 without power, provides for storage of 450,000 acre-feet initially and 1,100,000 acre-feet ultimately as part of the lower San Joaquin River and tributaries project. No construction work has been done.

*Flood problem.*—The area subject to flooding along the Stanislaus River extends from the foothill line to the San Joaquin River and contains about 35,000 acres, most of which is highly developed cropland. Railroads, highways, and suburban areas of Ripon, Oakdale, and Riverbank lie in the flood plain. Stanislaus River flows contribute to flooding of 50,000 acres along the San Joaquin River, 60,000 acres in the upper delta and 125,000 acres in the lower delta, which contain highly developed field and truck croplands, a number of public and commercial installations, several important military facilities, suburban developments, and vital railway, highway, and communications facilities.

*Recommended plan of improvements.*—Modification of the authorized dam and reservoir project to provide for storage of 2,400,000 acre-feet and a powerplant with an installed capacity in the order of 150,000 kilowatts.

*Estimated cost (price level of July 1960).*—All Federal, \$113,717,000.

#### *Project economics.*—

##### Annual charges (all Federal):

Interest and amortization.....	\$4, 468, 000
Maintenance and operation.....	820, 000
Taxes foregone.....	935, 000
<b>Total.....</b>	<b>6, 223, 000</b>

##### Annual benefits:

Damages prevented.....	1, 030, 000
Irrigation.....	4, 443, 000
Power.....	3, 993, 000
Recreation.....	350, 000
<b>Total.....</b>	<b>9, 816, 000</b>



*Benefit-cost ratio.*—1.6.

*Local cooperation.*—Upon completion of construction the project would become an integral part of the Central Valley project and be operationally and financially integrated with it; operation and maintenance of the project would be accomplished by the Secretary of the Interior; the flood control operation of the project would be in accordance with rules and regulations prescribed by the Secretary of the Army; and provided that local interests agree to maintain the existing levees on the Stanislaus River from Goodwin Dam to the San Joaquin River and prevent encroachment on the channel and floodway between the levees so as to preserve a safe carrying capacity throughout that reach of at least 8,000 cubic feet per second. The Chief of Engineers to make such adjustments in the project plan as he may find to be in the public interest after consultation with the Bureau of Reclamation and the State of California and to maintain, as necessary, suitable channel conditions to preserve the present non-damaging capacity of 8,000 cubic feet per second from Goodwin Dam to the San Joaquin River. Local interests are willing to meet requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Federal Power Commission: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

*Remarks.*—The legislation provides that before initiating any diversions of water from the Stanislaus River Basin in connection with the operation of the Central Valley project, the Secretary of the Interior shall determine the quantity of water required to satisfy all existing and anticipated future needs within that basin and the diversions shall at all times be subordinate to the quantities so determined. In this connection it is the committee's opinion that ultimate Stanislaus River development will necessitate the construction of economically justified upstream developments in both Tuolumne and Calaveras Counties.

The Stanislaus River should be developed as an entire basin and the only economically feasible means of providing water retention and distribution systems to serve these mountain counties of origin is to tie these projects into the larger New Melones project. Therefore, it is the hope of the committee that the present upstream studies being conducted in these counties by the Bureau of Reclamation may be expedited to permit timely consideration of this development.

#### HIDDEN RESERVOIR, FRESNO RIVER BASIN, CALIF.

(S. Doc. 37, 87th Cong.)

*Location.*—Fresno River is the most southerly of the major east-bank tributaries of San Joaquin River in Central Valley, Calif. It rises on the western slope of the Sierra Nevada and flows westerly through the mountains and foothills and thence across a flat valley. The river drains an area about 60 miles long with average width of 10 miles.

*Authority.*—Senate Public Works Committee resolution adopted June 26, 1958.

*Existing project.*—There is no Federal flood control project in the Fresno River Basin. Projects of the Bureau of Reclamation consist of the existing Friant Dam and the existing Madera Canal which deliver irrigation water from the reservoir to the local service areas. The State of California is constructing levees along the San Joaquin River which will extend up Fresno River to the Chowchilla Canal.

*Flood problems.*—The flood plain of Fresno River extends from the foothill line to San Joaquin River, and contains about 145,000 acres, including the city of Madera. Floods on the stream result mainly from rainfall in the season from November through April, and are characterized by high peak flows and short durations. The majority of flood damages are crop losses. In addition there is a need for irrigation water and development of recreation facilities.

*Recommended plan of improvement.*—A multiple-purpose reservoir for flood control, irrigation, recreation at the Hidden site on Fresno River, about 15 miles northeast of the city of Madera; supplemental channel improvements, together with levees and appurtenant works, on Fresno River for about 7 miles upstream from the Chowchilla Canal.

*Estimated cost, (price level of July 1959).—*

Federal.....	<sup>1</sup> \$14, 338, 000
Non-Federal.....	220, 000
<b>Total.....</b>	<b>14, 558, 000</b>

<sup>1</sup> The sum of \$3,698,000 will be reimbursed to the United States for irrigation.

### *Project economics—*

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$534, 000	\$11, 000	\$545, 000
Maintenance and operation.....	<sup>1</sup> 80, 000	6, 000	86, 000
<b>Total.....</b>	<b>614, 000</b>	<b>17, 000</b>	<b>631, 000</b>
<b>Annual benefits:</b>			
Damages prevented.....			615, 000
Irrigation.....			246, 000
Recreation.....			70, 000
<b>Total.....</b>			<b>931, 000</b>

<sup>1</sup> Includes \$17,000 apportioned to local interests for irrigation.

*Benefit-cost ratio.*—1.5.

*Local cooperation.*—(a) Hidden Dam and Reservoir: (1) Prior to construction of the dam and reservoir for irrigation, Secretary of the Interior make necessary arrangements for repayment of that part of the construction cost and annual operation and maintenance cost allocated to irrigation, presently estimated at \$3,698,000 and \$17,000, respectively, such repayment to be financially integrated into the Central Valley project of the Bureau of Reclamation. (2) Insofar as compatible with law and overall project requirements: a. After authorization, such reasonable modifications be made in project facilities and operation as may be found justified by the Commissioner of the U.S. Fish and Wildlife Service and agreed upon by the Chief



of Engineers; and *b.* The Chief of Engineers operate the dam and reservoir for irrigation in accordance with regulations prescribed by the Bureau of Reclamation. (3) Local interests sponsoring any permanent pool for fish and wildlife and/or recreation be required to settle all water rights pertaining to permanent pool for these purposes. (*b.*) Channel improvements.—(1) Provide, without cost to the United States all lands, easements, and rights-of-way; (2) make necessary relocations and alterations to existing improvements; (3) hold and save the United States free from damages; (4) maintain and operate; and (5) preserve, or restore and thereafter maintain the Fresno River channel from the Hidden Dam downstream to the channel work recommended herein at capacities prevailing in 1959. Local interests are willing to meet requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: The Department of the Interior makes several comments including its recognition of the views of the House Subcommittee on Public Works Appropriations during the fiscal year 1960 hearings, that construction should not be initiated on six of the Corps of Engineers projects in California, including the Hidden Dam on Fresno River, until repayment contracts have been negotiated. The Chief of Engineers has replied to the Secretary of the Interior that consideration was given to this matter and that his final report so recommends, and further that appropriate consideration would be given to the other views of the Department during the planning stage of the project, if authorized.

Department of Agriculture: Favorable.

Federal Power Commission: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau notes that \$1,055,000 of the investment in the proposed project has been allocated to recreation although the specific investment involved in providing the contemplated recreation facilities is estimated to be only \$140,000. The Bureau of the Budget states that the President, in his natural resources message to the Congress, instructed the Bureau of the Budget to reevaluate current standards for appraising the feasibility of water resources projects. A review of current standards is now underway. If the Fresno River Basin project is authorized by the Congress, the Budget would expect that, prior to the negotiation of irrigation repayment arrangements with the water users and a request for funds to initiate construction, the Corps of Engineers would reallocate the costs of the project to the extent necessary to conform with the evaluation standards adopted by the administration. The Bureau of the Budget advises that there would be no objection to the submission of the report to the Congress.

BUCHANAN RESERVOIR, CHOWCHILLA RIVER BASIN, CALIF.

(S. Doc. 98, 87th Cong.)

*Location.*—Chowchilla River is a major east-bank tributary of the San Joaquin River in central California. It enters the San Joaquin River about 18 miles west of Chowchilla.

*Authority.*—Senate Public Works Committee resolution adopted June 26, 1958.



*Existing project.*—There is no Federal flood control project in the Chowchilla River Basin.

*Flood problem.*—Floods on the stream result chiefly from rainfall in the season from November through April and are characterized by high peak flows and short durations. Crop losses account for the major part of the flood damages. Floodflows of the Chiuwchilla River also contribute to flooding along the San Joaquin River.

*Recommended plan of improvement.*—A multiple-purpose reservoir at the Buchanan site on Chowchilla River, about 16 miles northeast of the city of Chowchilla, and supplemental channel improvements, together with levees and appurtenant works, on Ash Slough for about 5 miles upstream from the Chowchilla Canal.

*Estimated cost (price level of July 1960).*—

Federal.....	<sup>1</sup> \$13, 585, 000
Non-Federal.....	150, 000
<b>Total.....</b>	<b>13, 735, 000</b>

<sup>1</sup> The sum of \$6,341,000 to be reimbursed by local interests for irrigation.

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$519, 000	\$8, 000	\$527, 000
Maintenance and operation.....	1 92, 000	2, 000	94, 000
<b>Total.....</b>	<b>611, 000</b>	<b>10, 000</b>	<b>621, 000</b>
<b>Annual benefits:</b>			
Damages prevented.....			579, 000
Irrigation.....			388, 000
Recreation.....			75, 000
<b>Total.....</b>			<b>1, 042, 000</b>

<sup>1</sup> Includes \$43,000 apportioned to local interests for irrigation.

*Benefit-cost ratio.*—1.7.

*Local cooperation.*—*a.* Buchanan Dam and Reservoir: (1) Prior to construction of the dam and reservoir, the Secretary of the Interior make necessary arrangements for repayment, under the provisions of reclamation law, of that part of the construction cost and annual operation and maintenance cost allocated to irrigation, presently estimated at \$6,341,000 and \$43,000, respectively, the final cost allocation to be made by the Secretary of the Army, with the assistance of the Secretary of the Interior; such repayment to be financially integrated into the Central Valley project of the Bureau of Reclamation; (2) insofar as compatible with law and overall project requirements: (*a*) After authorization, such reasonable modifications be made in project facilities and method of operation as may be found justified by the Commissioner of the U.S. Fish and Wildlife Service and agreed upon by the Chief of Engineers; and (*b*) the Chief of Engineers operate the dam and reservoir for irrigation in accordance with regulations prescribed by the Bureau of Reclamation; (3) the local interests sponsoring any permanent pool in the reservoir for fish and wildlife or recreation be required to settle all claims for water rights pertaining to establishment and use of a permanent pool for these purposes;

b. Channel improvements: Local interests, prior to construction, give assurances satisfactory to the Secretary of the Army that they will: (1) Furnish without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project; (2) make all necessary relocations and alterations to existing improvements, including highway facilities, which may be required for construction of the project; (3) hold and save the United States free from damages due to the construction works; (4) maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; and (5) preserve, or restore and thereafter maintain, the other channels of Chowchilla River and Ash and Berenda Sloughs from Buchanan Dam downstream to the Chowchilla Canal at the capacities existing in 1960. Local interests are willing to meet the requirements of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: The Department of the Interior has no objection to authorization of the project at this time; but believes that the question of physical integration with the Central Valley project deserves further consideration. In reply to the Secretary of the Interior, the Chief of Engineers indicated that the report provides for financial and functional integration with the Central Valley project, that negotiations concerning this matter are in process, and he concurs that authorization of the Buchanan project need not be delayed pending these negotiations.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.—*No objection.

RUSSIAN RIVER, CALIF., DRY CREEK BASIN

(H. Doc. 547, 87th Cong.)

*Location.*—The Russian River Basin is located in Mendocino and Sonoma Counties in the central part of California near the Pacific coast. Russian River rises in the Coastal Range about 130 miles north of San Francisco and flows southerly and westerly to the Pacific ocean.

*Authority.*—This report is in partial response to House Public Works Committee resolution adopted July 1, 1958, with reference to problems on Dry Creek, Big Sulphur Creek, Mark West Creek and other creeks in Russian River reports.

*Existing project.*—The existing Federal project provides for Coyote Valley Dam forming Lake Mendocino and channel stabilization works along the Russian River.

*Flood problems.*—Severe winter storms in the Russian River Basin cause frequent flooding of agricultural and urban areas. In addition to the flood problem, there is an increasing need for adequate supplies of water for agricultural, municipal, and industrial uses.

*Recommended plan of improvement.*—The plan of improvement for Dry Creek provides for construction of a dam at the Warm Springs site, and channel improvements downstream, for flood control, water supply, and recreation.



*Estimated cost (price level of December 1960).—*

Federal.....	\$42, 400, 000
Non-Federal.....	20, 000
Total.....	42, 420, 000

*Project economics.—*

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$1, 169, 000	\$591, 000	\$1, 760, 000
Maintenance and operation.....	207, 000	62, 000	269, 000
Total.....	1, 376, 000	653, 000	2, 029, 000
Annual benefits:			
Flood damage prevented.....			655, 000
Increased land use.....			204, 000
Water conservation.....			850, 000
Recreation.....			855, 000
Total.....			2, 564, 000

*Benefit-cost ratio.—1.3.*

*Local cooperation.*—Local interests will be required to hold and save the United States free from damage; maintain and operate the channel improvement; prevent encroachment on the channel improvement; adjust all claims for water rights; provide all lands, easements and rights-of-way; make all utility and highway bridge modifications for the channel work and reimburse the United States for costs allocated to water supply, in accordance with the Water Supply Act of 1958, presently estimated at \$11,730,000 for construction and \$50,000 for maintenance. Sonoma County Flood Control and Water Conservation District would assume requirements of local cooperation.

*Comments of the State and Federal agencies.—*

Department of the Interior: No objection.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.*—No objection. However, the Bureau would expect that prior to any request for funds to initiate construction of the project, it would be reevaluated in the light of the administration's standards and policies, pertaining to recreation, applicable at that time.

## REDWOOD CREEK, HUMBOLDT COUNTY, CALIF.

(H. Doc. 497, 87th Cong.)

*Location.*—Redwood Creek is on the western slopes of the coast range mountains in northwestern California. The stream drains about 283 square miles and enters the Pacific Ocean about 50 miles south of the Oregon boundary.

*Authority.*—1954 Flood Control Act.

*Existing project.*—There are no Federal or effective local flood protection projects, or related water control projects, on Redwood Creek.



*Flood problem.*—The runoff from winter rainstorms causes frequent flooding along the lower 4 miles of the stream, including the community of Orick which was severely damaged in January 1953.

*Recommended plan of improvement.*—The improvements consist of an improved channel, levees, and revetment along the lower 4 miles of the stream.

*Estimated cost (July 1960 price level).*—

Federal.....	\$2, 580, 000
Non-Federal.....	270, 000
Total.....	2, 850, 000

*Project economics.*—

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$95, 000	\$13, 000	\$108, 000
Maintenance and operation.....		19, 500	19, 500
Loss of land productivity.....		1, 500	1, 500
Total.....	95, 000	34, 000	129, 000
<b>Annual benefits:</b>			
Damages prevented.....			222, 000
Land enhancement.....			6, 000
Total.....			228, 000

*Benefit-cost ratio.*—1.8.

*Local cooperation.*—Provide all lands, easements, and rights-of-way needed for the project, including relocation and alteration of utilities; hold and save the United States free from damages due to the works; maintain and operate the completed works; and prevent encroachment on the flood channels and ponding area, or provide substitute storage capacity or equivalent pumping capacity. Local interests have indicated willingness to meet requirements of local cooperation.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### LOS ANGELES RIVER BASIN, CALIF.

The Los Angeles and San Gabriel Rivers and Ballona Creek drain an area of 1,717 square miles in southwestern California. The Los Angeles River is formed by the junction of Calabasas and Bell Creeks near the Los Angeles-Ventura County line, flows southeast 20 miles along the south side of the San Fernando Valley, then turns and flows south for 30 miles and discharges into the Pacific Ocean through a diversion channel in the city of Long Beach. It drains an area of 890 square miles including 137 square miles directly tributary to the Rio Grande, a cross channel which carries part of the flow of the San Gabriel River to the Los Angeles River. The river traverses the

agricultural and residential section of the San Fernando Valley and the highly developed industrial section of the city of Los Angeles. The San Gabriel River is formed by the junction of its East and West Forks in the San Gabriel Mountains. After leaving the mountains near the city of Azusa, the river divides into two branches, the branch to the west known as the Rio Hondo flowing southwest to its junction with the Los Angeles River, 12 miles from the ocean, and the branch to the east continuing south as the San Gabriel River to discharge into the Pacific Ocean 6 miles east of Los Angeles River. It drains an area of 698 miles, exclusive of the area tributary to the Rio Hondo. Below Azusa to Whittier Narrows the river flows through a highly developed agricultural community. Ballona Creek drains an area of 129 square miles adjoining the Los Angeles River Basin on the west.

In order to provide for the control of floods and to develop the water resources of the Los Angeles River Basin, Congress in the Flood Control Act of 1936, as amended by subsequent acts, including the act of 1941, authorized a comprehensive plan of improvement for the basin as recommended by the Chief of Engineers in House Document No. 838, 76th Congress. The project provides flood control for a large part of Los Angeles County, including most of the city of Los Angeles and several adjacent metropolitan areas. The location of the work is along the Los Angeles and San Gabriel Rivers, Rio Hondo, Ballona Creeks, and their tributaries. The improvements may be divided into four general groups in accordance with their respective functions: (1) Debris basins, (2) tributary channels, (3) reservoirs, and (4) main channels.

The Congress, in approving the comprehensive plan for the Los Angeles River Basin, as in the case of many other basins throughout the Nation, authorized only enough money to initiate the more important projects. Subsequent acts of Congress included additional monetary authorizations for the continuation of the approved comprehensive plan. The present total estimated cost of the projects included within the authorized Los Angeles River Basin program of the Corps of Engineers, subject to a monetary limitation, is \$350,-265,000. Monetary authorization in the amount of \$286,041,000 has been made available by the Congress to date. Funds totaling \$272,-474,000 have been appropriated through fiscal year 1962, leaving a balance of available authorization of \$13,567,000. The approved budget estimate for fiscal year 1963 is \$15 million, leaving a deficit balance of monetary authorization of \$1,433,000.

The committee has been informed that if additional monetary authorization for the Los Angeles River Basin is not made available at this time, it will be necessary to curtail work on the project. Inasmuch as contracts are usually awarded in the spring of the year for accomplishment during the dry season, lack of monetary authority to permit award of such contracts in the spring of 1963 would result in delays in prosecuting the project of up to 1 year or longer.

The committee considers it desirable to authorize additional monetary authorizations for the Los Angeles River Basin comprehensive plan at this time in order that work on this major project, now approximately 80-percent complete, need not be curtailed. In view of



the anticipated deficit which will result with the appropriation of fiscal year 1963 funds, and in order to allow for transfers of appropriated funds from other projects within the authority available to the Chief of Engineers should such transfers be found necessary or advantageous to the prosecution of the work in fiscal year 1963, the committee considers that the monetary authorization should be increased by \$3,700,000.

With respect to appropriations for the fiscal year 1963 which are contained in the pending public works appropriation bill, the committee was advised that the Los Angeles River Basin is the only project in which there is a deficit in monetary authorizations with respect to the appropriations contemplated in the approved budget estimate.

#### ROGUE RIVER BASIN, OREG. AND CALIF.

(H. Doc. 566, 87th Cong.)

*Location.*—Rogue River Basin is located in southwestern Oregon and northern California with Oregon containing about 97 percent of the basin area.

*Authority.*—Public Law 183 approved July 1, 1935, and Flood Control Acts of 1936 and 1958.

*Existing project.*—The Corps has provided seven minor local protection works under emergency and continuing authorities at total cost of \$316,000. Navigation project now under construction at mouth of river will provide 13-foot project and cost \$3.5 million. Bureau of Reclamation has constructed 16,000-kilowatt powerplant on tributary. Local interests have irrigation facilities for about 72,000 acres. Of nine organized districts serving 42,000 acres, three have storage facilities. There is a small reservoir for water supply and eight private hydroelectric plants with a total capacity of about 56,000 kilowatts.

*Flood problem.*—Flood damages occur in the Rogue River Basin in a number of discontinuous areas along the main stream and its principal tributaries. The most recent major flood occurred in 1955 and inundated more than 13,000 acres of land.

*Recommended plan of improvement.*—Three multiple-purpose reservoirs. A rock and gravel embankment dam at Lost Creek site, 360 feet high with usable storage capacity of 315,000 acre-feet. A rock and gravel embankment dam at Elk Creek site, 235 feet high with usable storage capacity of 95,000 acre-feet. An earth and gravel embankment dam at the Applegate River site, 230 feet high with usable storage capacity of 65,000 acre-feet.

*Estimated cost (all Federal, July 1961 price level).*—

Lost Creek Dam-----	\$74, 500, 000
Elk Creek Dam-----	17, 500, 000
Applegate Dam-----	14, 700, 000
Total-----	<sup>1</sup> 106, 700, 000

<sup>1</sup> Of this amount, \$5,977,000 and \$16,592,000 will be repaid by local interests for water supply and irrigation, respectively.



*Project economics.*—

## Annual charges:

Interest and amortization-----	\$3, 191, 000
Operation, maintenance, and replacement-----	802, 400
Taxes foregone and economic costs-----	78, 800

Total-----	4, 072, 200
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## Annual benefits:

Flood control-----	1, 360, 000
Irrigation-----	925, 000
Water supply-----	322, 700
Fish and wildlife-----	1, 130, 200
Power-----	1, 881, 700
Recreation-----	528, 000

Total-----	6, 147, 600
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*Benefit-cost ratio.*—1.5.

*Local cooperation.*—Prior to construction, they will agree to reimburse the United States for first costs and annual operation, maintenance, and replacement costs allocated to municipal and industrial water supply storage, presently estimated at \$5,977,000 and \$24,900, respectively; the Secretary of the Interior make necessary arrangements for repayment of that part of the construction cost and annual operation, maintenance, and replacement costs allocated to irrigation, presently estimated at \$13,007,000 and \$66,500, respectively, for the Lost Creek-Elk Creek Reservoirs and \$3,585,000 and \$9,900, respectively, for the Applegate Reservoir; and the State of Oregon take necessary action to insure maintenance, in the streams, of flows to be released for benefit of the fishery. Local interests have indicated willingness to cooperate.

*Comments of the State and Federal agencies.*—

Department of the Interior: In commenting on the report the Secretary of the Interior indicated that the recommendations and authorizing legislation should include language indicating that no construction be undertaken until the Department of Interior has on hand signed contracts for repayment of the cost of irrigation. In reply, the Chief of Engineers indicated that the report has been revised to provide that prior to construction local interests give assurances satisfactory to the Secretary of the Army that they will make necessary arrangements with the Secretary of the Interior for repayment of irrigation costs under the provisions of reclamation law. In order that urgently needed flood control and other services may be provided under this arrangement without either undue delay should these projects be authorized, the Chief of Engineers will consult with and obtain the concurrence of the Department of Interior on a satisfactory basis for proceeding with project construction considering, among other factors, the acceptance of assurances of local cooperation.

Department of Commerce: Favorable.

Department of Agriculture: Favorable.

Federal Power Commission: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of Oregon: Favorable.

State of California: Favorable.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget comments that while there would be no objection to the submission of the proposed report to the Congress, the Bureau would recommend that if the project is authorized by Congress the terms of authorization permit later determination of the appropriate agency to assume operating responsibility for the recommended projects. After careful consideration of the matter of operational responsibility, the Secretary of the Army concurs in the recommendations of the Chief of Engineers and recommends authorization of the proposed reservoirs for construction, operation and maintenance by the Corps of Engineers.

BURNS CREEK DAM AND RESERVOIR, SNAKE RIVER, IDAHO

(S. Doc. 130, 87th Cong.)

*Location.*—The Snake River is the largest tributary of the Columbia River. The portion of the Snake River of interest in this report is the 5,750 square-mile drainage area above Heise, Idaho, in southeastern Idaho and western Wyoming.

*Authority.*—Senate Public Works Committee resolution adopted March 19, 1954.

*Existing project.*—The principal water-resource developments in this section of the basin are Jackson Lake in Wyoming, with 850,000 acre-feet of storage for irrigation, and Palisades Reservoir in Idaho, with 1,401,600 acre-feet for irrigation, power, and recreation. The partial flood protection provided by these storage reservoirs is augmented in the reach between Heise and Roberts by levees and channel improvements to provide a safe channel carrying capacity of about 20,000 cubic feet per second.

*Flood problem.*—Floods frequently experienced along the Snake River from Heise to American Falls affect about 300 acres of residential and commercial developments in Roberts and Idaho Falls and 90,000 acres of land devoted to irrigated row crops and hay. With control from existing storage reservoirs and levee protection, the remaining average annual damages under 1962 conditions are about \$300,000.

*Recommended plan of improvement.*—Improvement of Snake River, Idaho, by the Bureau of Reclamation, as part of the Palisades project and in accordance with the provisions of Federal reclamation laws, by design, construction, and operation of a dam and reservoir for irrigation, power, flood control, recreation, and the preservation and propagation of fish and wildlife resources, at the Burns Creek site with a storage capacity of about 234,000 acre-feet, and a powerplant of about 90,000 kilowatts.

*Estimated cost (price level of January 1962).*—All Federal, \$52 million.



*Project economics.*—

## Annual charges (Federal):

Interest and amortization.....	\$1, 553, 000
Maintenance and operation.....	233, 000
Total.....	1, 786, 000

## Annual benefits:

Damages prevented.....	120, 000
Irrigation.....	43, 000
Power.....	2, 556, 000
Recreation.....	231, 000
Total.....	2, 950, 000

*Benefit-cost ratio.*—1.7.*Local cooperation.*—None required.*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Idaho: Favorable.

State of Wyoming: Opposes the project.

State of Utah: Opposes the project.

*Comments of the Bureau of the Budget.*—The Bureau of the Budget notes the adverse comments of the Governors of Utah and Wyoming and suggests that they be brought to the attention of Congress and that the Congress be reminded that the President recommended authorization of the project in his conservation message, February 1962. The Bureau also advises there would be no objection to submission of the report to Congress and recommends authorization of the project.

## RIRIE DAM AND RESERVOIR, WILLOW CREEK, IDAHO

(H. Doc. 562, 87th Cong.)

*Location.*—Willow Creek drains a 700-square-mile area tributary to Snake River in southeastern Idaho. Willow Creek enters Snake River at Idaho Falls. Snake River is the largest tributary of the Columbia River.

*Authority.*—Senate Public Works Committee resolutions adopted March 4, 1952, and March 19, 1954, and House Public Works Committee resolution adopted June 2, 1953.

*Existing project.*—There are no Federal flood control projects in the Willow Creek Basin. Local people have constructed various irrigation canals and diversions.

*Flood problem.*—As the stream enters the relatively flat Snake River plain, about 10 miles above Idaho Falls, the stream divides into numerous channels which have capacity to carry only minor flows. Flooding occurs principally from melting of the winter snowpack, however, rain floods can occur as evidenced by the February 1962 flood.

*Recommended plan of improvement.*—Construction by the Corps of Engineers of a dam and reservoir, with a storage capacity of about



135,000 acre-feet, on Willow Creek about 15 miles east of Idaho Falls, for flood control, irrigation, municipal water supply and recreation, and channel improvements along lower Willow Creek. Operation and maintenance by the Bureau of Reclamation.

*Estimated cost (price level of March 1962).*—All Federal, \$7,027,000.<sup>1</sup>

*Project economics.*—

Annual charges (all Federal) :

Interest and amortization.....	\$206, 000
Maintenance and operation.....	41, 000
Total.....	<u>247, 000</u>

Annual benefits:

Flood control.....	200, 000
Irrigation.....	125, 000
Water supply.....	90, 000
Recreation.....	80, 000
Total.....	<u>495, 000</u>

*Benefit-cost ratio.*—2.0.

*Local cooperation.*—Prior to construction, agree to reimburse the United States for costs allocated to water supply in accordance with the Water Supply Act of 1958, as amended, such costs presently estimated at \$700,000 for construction and \$4,000 annually for operation, maintenance, and replacements; obtain the water rights needed for storage and use of the water and hold and save the United States free from damages for water-rights claims resulting from construction and operation of the project; and make necessary arrangements with the Secretary of the Interior for repayment, under the provisions of reclamation law, of the construction cost and annual operation, maintenance, and replacement costs allocated to irrigation, presently estimated at \$960,000 and \$5,000, respectively.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Idaho: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

BLACKFOOT DAM AND RESERVOIR, BLACKFOOT RIVER, IDAHO

(H. Doc. 568, 87th Cong.)

*Location.*—Blackfoot River drains a 1,300-square-mile area tributary to Snake River in southeastern Idaho near Idaho Falls. Blackfoot River enters the Snake River just above American Falls Reservoir. Snake River is the largest tributary of the Columbia River.

*Authority.*—Senate Public Works Committee resolutions adopted March 4, 1952, and March 19, 1954, and House Public Works Committee resolution adopted June 2, 1953.

<sup>1</sup> Includes \$960,000 allocated to irrigation, and \$700,000 allocated to water supply to be repaid by local water users.

*Existing project.*—Improvement by the Corps of Engineers of the lower 18 miles of Blackfoot River for flood control is scheduled during 1962. The Bureau of Indian Affairs has constructed Blackfoot Dam and Reservoir (413,000 acre-feet usable capacity) on Blackfoot River and the Grays Lake Reservoir on Willow Creek which diverts water into the Blackfoot River Basin.

*Flood problem.*—Floods result primarily from snowmelt, but sometimes are augmented by storm runoff. Channel capacities are inadequate to contain the flood flows.

*Recommended plan of improvement.*—Modification of the existing Blackfoot Dam and Reservoir to provide for flood control by raising the maximum pool 2 feet, increases the spillway capacity, improving the outlook works, and appurtenant work. Operation and maintenance by the Bureau of Indian Affairs.

*Estimated cost (price level of January 1962).*—All Federal, \$829,000.

*Project economics.*—

Annual charges (all Federal):

Interest and amortization-----	\$31, 000
Maintenance and operation-----	5, 000

Total-----	36, 000
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Annual benefits: Damages prevented-----	41, 000
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*Benefit-cost ratio.*—1.1.

*Local cooperation.*—None required.

*Comments of the State and Federal agencies.*—

Department of the Interior: No objection.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Idaho: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

# ASOTIN DAM AND RESERVOIR, SNAKE RIVER, IDAHO AND WASH.

(H. Doc. 403, 87th Cong.)

*Location.*—The Snake River is a principal tributary of the Columbia River and drains 109,000 square miles in Idaho, Washington, and Oregon. The Asotin project site is located at mile 146.8 on Snake River at the upstream limits of the town of Asotin, Wash. The drainage area above the site is 93,100 square miles.

*Authority.*—Resolution, Senate Committee on Public Works, adopted July 28, 1955, and other resolutions.

*Existing project.*—A total of 10½ million acre-feet of storage, sufficient to control major Columbia River floods to 1,030,000 cubic feet per second at The Dalles is presently available at Federal and non-Federal projects existing or under construction in the Columbia River Basin. Existing, under construction and authorized Federal projects have an aggregate installed hydroelectric capacity of 400,000 kilowatts.

*Flood problem.*—The area of major flood damage in the Columbia Basin lies along the 140-mile reach of the Columbia River below

Bonneville Dam. Flood damages as modified by existing projects is about \$24 million annually.

*Recommended plan of improvement.*—Construction by the Corps of Engineers of a relatively low-head dam and reservoir, with an initial installed capacity of 288,000 kilowatts, with provisions for adding a navigation lock in the future when economically justified, for the production of hydroelectric power and for recreation.

*Estimated cost (price level of July 1961).*—All Federal, \$99,818,000.<sup>1</sup>

*Project economics (based on 100-year life and 2½ percent interest).*—

Annual charges (all Federal) :

Interest and amortization.....	\$2, 978, 000
Operation, maintenance, and replacement.....	948, 000
Subtotal.....	3, 926, 000
Taxes foregone.....	876, 000
Total.....	4, 802, 000

Annual benefits (with Canadian storage) :

Power.....	10, 017, 000
Recreation.....	32, 000
Total.....	10, 049, 000

*Benefit-cost ratio.*—2.1

*Local cooperation.*—None required.

*Comments of the State and Federal agencies.*—

Department of the Interior: Generally favorable.

Department of Agriculture: Favorable.

Department of Commerce: Generally favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

State of Idaho: Generally favorable. Expressed disappointment that full navigation facilities in the dam were not found justified.

State of Washington: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

CHINA GARDENS DAM AND RESERVOIR, SNAKE RIVER, IDAHO, WASH., AND OREG.

(H. Doc. 403, 87th Cong.)

*Location.*—The Snake River is a principal tributary of the Columbia River and drains 109,000 square miles in Idaho, Washington, and Oregon. The China Gardens project site is located on Snake River, mile 172.5, about 3.5 miles above the mouth of Grande Ronde River and about the same distance below the Oregon-Washington State line. The drainage area above the site is 88,000 square miles.

*Authority.*—Resolution, Senate Committee on Public Works, adopted July 28, 1955, and other resolutions.

*Existing project.*—A total of 10½ million acre-feet of storage sufficient to control major Columbia River floods, to 1,030,000 cubic feet

<sup>1</sup> Initial construction cost. Project economics based on initial construction cost of \$99,818,000 plus present worth of additional installation cost of \$7,738,000 at 50th year.



per second at The Dalles is presently available at Federal and non-Federal projects existing or under construction in the Columbia River Basin. Existing, under construction and authorized Federal projects have an aggregate installed hydroelectric capacity of 9,400,000 kilowatts.

*Flood problem.*—The area of major flood damages in the Columbia River Basin lies along the 140-mile reach of the Columbia River below Bonneville Dam. Flood damages as modified by existing projects is about \$24 million annually.

*Recommended plan of improvement.*—Construction by the Corps of Engineers of a relatively low-head dam and reservoir with an initial installed capacity of 180,000 kilowatts for the production of hydroelectric power and for recreation.

*Estimated cost (price level of July 1961).*—All Federal, \$74,777,000.<sup>1</sup>

*Project economics (based on 100-year life and 25/8 percent interest).*—

Annual charges (all Federal):

Interest and amortization.....	\$2, 244, 000
Operation, maintenance, and replacement.....	800, 000
Subtotal.....	3, 044, 000
Taxes foregone.....	529, 000
Total.....	3, 573, 000

Annual benefits (with Canadian storage):

Power.....	6, 055, 000
Recreation.....	13, 000
Total.....	6, 068, 000

*Benefit-cost ratio.*—1.7.

*Local cooperation.*—None required.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of Idaho: Favorable.

State of Washington: No objection.

State of Oregon: No objection.

*Comments of the Bureau of the Budget.*—No objection.

# BRADLEY LAKE, COOK INLET, ALASKA

(H. Doc. 455, 87th Cong.)

*Location.*—Bradley Lake is located on Kenai Peninsula about 100 miles south of Anchorage.

*Authority.*—Flood Control Acts of 1948 and 1950.

*Existing project.*—There is no existing Federal project at Bradley Lake; however, the existing power generating capacity in the Cook Inlet area, excluding military plant, totals about 57,000 kilowatts of which 30,000 kilowatts are provided by the Eklutna hydroelectric

<sup>1</sup>Initial construction cost. Project economics based on initial construction cost of \$74,777,000 plus present worth of additional installation cost of \$6,858,000 at 50th year.

development of the Bureau of Reclamation and about 14,500 kilowatts by the Anchorage thermal-electric plant of the Chugach Electric Association, Inc., a Rural Electrification Administration cooperative. Small load centers on the Kenai peninsula are supplied by internal combustion generation.

*Power problem.*—Based upon a Federal Power Commission estimate, a shortage of about 20,000 kilowatts of power will exist in the area by 1965, and 50,000 by 1970. The cost of alternative thermal-electric power is high.

*Recommended plan of improvement.*—A dam at the outlet of Bradley Lake, to raise its elevation about 100 feet, and a powerplant, with 64,000 kilowatts of installed capacity, on Kachemak Bay. Construction by the Department of the Army. Operation and maintenance by the Department of the Interior.

*Estimated cost (June 1960 price level).*—

Federal.....	\$45, 750, 000
Non-Federal.....	None

*Project economics.*—

Annual charges (all Federal) :

Interest and amortization.....	\$1, 699, 000
Maintenance and operation.....	258, 000

Total.....	1, 957, 000
Annual benefits: Power.....	3, 232, 000

*Benefit-cost ratio.*—1.7.

*Local cooperation.*—None required.

*Comments of the State and Federal agencies.*—

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Federal Power Commission: Favorable.

State of Alaska: Favorable.

*Comments of the Bureau of the Budget.*—No objection.

#### SECTION 204

This section amends the existing authority of the Corps of Engineers to construct small flood control projects without specific congressional authorization by increasing the current Federal cost limitation from \$400,000 per project to \$2 million per project. Projects under this authority must be economically justified and complete within themselves, and are planned to provide the same scale, scope, and type of developments that would have been recommended for the localities concerned under normal project authorization procedures. Federal funds allotted under this legislation must be sufficient to complete Federal participation. Local cooperation is similar to that required for projects authorized under normal procedures. Control would be exercised by the requirement that construction shall not be undertaken on any project covered by this section with a Federal cost in excess of \$1 million unless such project has been approved by resolutions adopted by the Public Works Committees of the Senate and House of Representatives.

The committee was advised that the existing small flood control project program has become an increasingly valuable vehicle for pro-

viding flood damage relief for localized damage areas—both urban and agricultural. Protection can be provided under this small project program in a significantly shorter time period than possible under regular authorization procedures. It is considered that the increase in individual project cost limitation will provide a desirable and reasonable extension of this useful program.

## SECTION 205

This section would grant the consent of Congress for the construction of a dam across Savannah River between South Carolina and Georgia.

The Duke Power Co. plans a 2-million-kilowatt steam plant on the Savannah River about 8 miles below Hartwell Dam and immediately upstream of Sanders Ferry Bridge. A diversion dam across the Savannah River is needed and proposed to provide cooling water for the plant. This dam would provide intake water storage and/or act as a thermal barrier for the coolant if another dam is constructed downstream.

The Savannah River in this reach is a navigable water of the United States. Because of this, authorization by the Congress is necessary to build the dam. Section 205 would provide the consent of Congress. The section includes a provision for approval of plans of Duke Power Co. by the Chief of Engineers and the Secretary of the Army before commencement of work. The section further provides that the grantee or its successors shall hold and save the United States free from all claims by reason of the future construction and operation of the authorized Hartwell Reservoir or any other Federal project upstream or downstream from the dam herein authorized.

The committee believes that the consent of Congress is warranted to provide this dam.

## SECTION 206

This section is similar to that in previous flood control acts providing for authorization of needed surveys at specifically named localities.

## SECTION 207

This section identifies title II of the bill as the Flood Control Act of 1962.

## EXPLANATION OF COMMITTEE AMENDMENTS

An explanation of the committee amendments follows. Where new sections have been added the succeeding sections in the bill have been renumbered accordingly.

Page 7, following line 11.

Big Sandy River, lock and dam No. 3, Kentucky: In 1952, by act of Congress, the maintenance and operation of the lock and dam No. 3 on the Big Sandy River was turned over to local interests. Early in July, an unusual flash flood washed around the old lock abutments causing extensive washing away of adjoining land supporting private homes and U.S. Highway No. 23, Lawrence County, Ky. Seventy



thousand square feet of park area and one building was washed into the Big Sandy River as a result of the faulty operation of the dam wickets. The amendment contains a limitation of \$200,000, which amount the Corps of Engineers indicates will be sufficient to repair the damage. The committee urges approval of the amendment.

Page 12, following line 15, new section 102, each erosion.

This section would amend existing laws to permit increased Federal participation in shore protection projects and investigations, and provide for changes in procedures to expedite Federal action in planning and undertaking protection for the most endangered coastal areas, beyond the legislative authorities now available. It would provide for increased Federal participation in four important aspects of project development:

(1) Studies would be made entirely at Federal cost rather than on a 50-50 Federal-non-Federal cooperative basis as at present. This is desirable because it would enable the Corps of Engineers to study entire physiographic reaches of shores where the problems and their solution can be treated as an entity, rather than on the fragmented basis required by adoption to local governmental boundaries.

(2) The Federal share of the costs of protection of publicly owned or used non-Federal shore frontage would be increased from one-third of the costs to one-half.

(3) The Federal Government could assume up to 100 percent of the total costs of protecting the frontage of certain State, county, or municipal parks and conservation areas which meet defined criteria of public interest.

(4) Authority to undertake meritorious small shore protection and beach erosion control projects without specific authorization by Congress, and with appropriate limitations, would be granted to the Secretary of the Army and the Chief of Engineers, similar to that already provided for small flood control and navigation projects.

These changes in the Federal interest would place shore protection studies on a comparable basis for planning with other water resource investigations; encourage and assist local interests to cooperate more fully in projects by reducing the present financial burden of cooperation; and, perhaps most important of all, designate shoreline protection, conservation, and development as a recognized field for Federal participation.

In addition, this section would authorize reimbursement of local interests for work done by them on authorized projects which individually do not exceed \$1 million in total cost after initiation of the survey studies which form the basis for the project.

The storms and high tides of March 6-8, 1962, caused unprecedented damage to the shores and to developments thereon from Florida to Long Island. Much of it occurred in the States of New York, New Jersey, Delaware, and Maryland. Available estimates indicates that total losses to public and private property approximated \$200 million. Human suffering was extensive, and many persons lost their homes and investments on the shores. The prolonged duration of high water levels also eroded beaches and protective dunes extensively and barrier islands were overflowed so that many areas and properties were ex-

posed to wave and water damages not previously experienced even in hurricanes.

Most individuals and local communities have insufficient resources to meet such catastrophes. The Federal Office of Emergency Planning, assisted by other Federal agencies, with funds granted by the President under Public Law 875, 81st Congress, undertook emergency cleanup and repairs but work under this law cannot extend to the permanent works needed for protection against major storms.

In some areas, existing requirements for local cooperation have retarded full accomplishment of authorized work where local interests would be required to bear a large part of the total costs. This section would increase the Federal share of costs up to 50 percent of the total costs of protecting non-Federal publicly owned or used property, other than conservation areas, and would make the new provisions applicable to authorized projects which have not been completed prior to the date of approval of this act. Where conservation areas are involved the Federal share could be up to 100 percent. The increase would not be unduly burdensome to the Federal Government in view of the benefits all the public receives from the shores and beaches of our coasts.

The extension of the Federal interest in shore protection, conservation, and development, provided by this section is considered fully in the national interest and an important step forward in Federal-State cooperation in the national resources field. The committee would expect that the provisions of this section pertaining to new work costs would be applied to the beach erosion control projects and measures authorized by the bill.

Page 13, following line 11, new section 105, Redondo Beach King Harbor, Calif.

The committee added a new section 195, which changes the name of the Redondo Beach Harbor, Calif., to the Redondo Beach King Harbor, Calif. This change has already been made by the local authorities to honor Congressman Cecil R. King, who represents this area, which is a part of the 17th Congressional District of California. The purpose of this change is to allow this designation to be made on the various Federal maps and other Federal designations that will be used to locate this harbor. The harbor is not a Federal project. It is purely a municipally operated project. The committee recommends approval of this change to honor a distinguished colleague for his outstanding service in the Congress and to facilitate proper marking of any Federal map or designation in the future.

Page 35, line 4.

The figure "five" is changed to "eight." This was a typographical error in the bill as introduced. The capacity of the channel to be maintained by the Secretary of the Army should be 8,000 cubic feet per second.

#### CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3 of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is



enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman) :

ACT OF AUGUST 13, 1946, AS AMENDED

AN ACT Authorizing Federal participation in the cost of protecting the shores of publicly owned property

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That (a) with the purpose of preventing damage to the shores of the United States, its Territories and possessions and promoting and encouraging the healthful recreation of the people, it is hereby declared to be the policy of the United States, subject to the following provisions of this Act to assist in the construction, but not the maintenance, of works for the restoration and protection against erosion, by waves and currents, of the shores of the United States, its Territories and possessions.

(b) The Federal contribution in the case of any project referred to in subsection (a) shall not exceed [one-third] *one-half* of the cost of the project, and the remainder shall be paid by the State, municipality, or other political subdivision in which the project is located, *except that the costs allocated to the restoration and protection of Federal property shall be borne fully by the Federal Government, and further, that Federal participation in the cost of a project for restoration and protection of State, county, and other publicly owned shore parks and conservation areas may be the total cost exclusive of land costs, when such areas: Include a zone which excludes permanent human habitation; include but are not limited to recreational beaches; satisfy adequate criteria for conservation and development of the natural resources of the environment; extend landward a sufficient distance to include, where appropriate, protective dunes, bluffs, or other natural features which serve to protect the uplands from damage; and provide essentially full park facilities for appropriate public use, all of which shall meet with the approval of the Chief of Engineers.*

(c) When in the opinion of the Chief of Engineers the most suitable and economical remedial measures would be provided by periodic beach nourishment, the term "construction" may be construed for the purposes of this Act to include the deposit of sand fill at suitable intervals of time to furnish sand supply to project shores for a length of time specified by the Chief of Engineers.

(d) Shores other than public will be eligible for Federal assistance if there is benefit such as that arising from public use or from the protection of nearby public property or if the benefits to those shores are incidental to the project, and the Federal contribution to the project shall be adjusted in accordance with the degree of such benefits.

(e) No Federal contribution shall be made with respect to a project under this Act unless the plan therefor shall have been specifically adopted and authorized by Congress after investigation and study by the Beach Erosion Board under the provisions of section 2 of the River and Harbor Act approved July 3, 1930, as amended and supple-



mented, or, in the case of a small project under section 3 of this Act, unless the plan therefor has been approved by the Chief of Engineers.

[SEC. 2. When the Chief of Engineers shall find that any such project has been constructed in accordance with the authorized plans and specifications he shall cause to be paid to the State, municipality, or other political subdivision involved the amount authorized by Congress.

[SEC. 3. The Chief of Engineers may, in his discretion, from time to time, make payments on such construction as the work progresses, but these payments, including previous payments, if any, shall not be more than the United States pro rata part of the value of the labor and materials which have been actually put into such construction in conformity to said plans and specifications: *Provided*, That the construction of restoration and protective works under this Act may be undertaken by the Chief of Engineers upon the request of, and contribution of required funds by, the interested State, municipality, or other political subdivision.]

*Sec. 2. The Secretary of the Army is hereby authorized to reimburse local interests for work done by them on authorized projects which individually do not exceed \$1,000,000 in total cost after initiation of the survey studies which form the basis for the project: Provided, That the work which may have been done on the projects is approved by the Chief of Engineers as being in accordance with the authorized projects: Provided further, That such reimbursement shall be subject to appropriations applicable thereto or funds available and shall not take precedence over other pending projects of higher priority for improvements.*

*Sec. 3. The Chief of Engineers is hereby authorized to undertake construction of small shore and beach restoration and protection projects not specifically authorized by Congress, which otherwise comply with section 1 of this Act, when he finds that such work is advisable, and he is further authorized to allot from any appropriations heretofore or hereinafter made for civil works, not to exceed \$3,000,000 for any one fiscal year for the Federal share of the costs of construction of such projects: Provided, That not more than \$400,000 shall be allotted for this purpose for any single project and the total amount allotted shall be sufficient to complete the Federal participation in the project under this section including periodic nourishment as provided for under section 1(d) of this Act: Provided further, That the provisions of local cooperation specified in section 1 of this Act shall apply: And provided further, That the work shall be complete in itself and shall not commit the United States to any additional improvement to insure its successful operation, except for participation in periodic beach nourishment in accordance with section 1(d) of this Act, and as may result from the normal procedure applying to projects authorized after submission of survey reports.*

SEC. 4. As used in this Act, the word "shores" includes all the shorelines of the Atlantic and Pacific Oceans, the Gulf of Mexico, the Great Lakes, and lakes, estuaries, and bays directly connected therewith.

## SECTION 205 OF THE FLOOD CONTROL ACT OF 1948

SEC. 205. That the Secretary of the Army is hereby authorized to allot from any appropriations heretofore or hereafter made for flood control, not to exceed **[\$10,000,000]** *\$525,000,000* for any one fiscal year, for the construction of small **[flood-control]** *projects for flood control and related purposes* not specifically authorized by Congress, which come within the provisions of section 1 of the Flood Control Act of June 22, 1936, when in the opinion of the Chief of Engineers such work is advisable: **[Provided, That not more than \$400,000 shall be allotted for this purpose at any single locality from the appropriations for any one fiscal year:]** *Provided, That not more than \$2,000,000 shall be allotted under this section for a project at any single locality and the amount allotted shall be sufficient to complete Federal participation in the project: And provided further, That no construction shall be undertaken on any project under the provisions of this section with a Federal cost in excess of \$1,000,000 unless such project has been approved by resolutions adopted by the Committee on Public Works of the Senate and the Committee on Public Works of the House of Representatives, respectively: Provided further, That the provisions of local cooperation specified in section 3 of the Flood Control Act of June 22, 1936, as amended, shall apply: And provided further, That the work shall be complete in itself and not commit the United States to any additional improvements to insure its successful operation, except as may result from the normal procedure applying to projects authorized after submission of preliminary examination and survey reports.*

## SUPPLEMENTAL VIEWS

We are not opposed to the enactment of H.R. 13273, for we believe that the periodic enactment of river and harbor and flood control legislation is an essential part of a sound Federal program for the wise development of the Nation's water resources. We do, however, strongly oppose the inclusion in this bill of (1) projects on which final reports, complete with the comments of affected States and interested Federal agencies, have not been submitted to the Congress in accordance with the requirements of governing law, and (2) controversial projects which are opposed by responsible individuals and groups who have requested an opportunity to be heard by the House Committee on Public Works but have not been afforded such an opportunity.

### PROJECTS ON WHICH FINAL REPORTS HAVE NOT BEEN SUBMITTED TO THE CONGRESS

Title I includes two projects on which final reports have not been submitted to the Congress. They are identified as Newark Bay, Hackensack and Passaic Rivers, N.J. (channels to Port Elizabeth), and Fire Island Inlet and Shore Westerly to Jones Inlet, N.Y.

#### *Requirements of governing law and administrative procedures*

Existing law requires that, before the Chief of Engineers, Department of the Army, shall submit a plan, proposal, or report for any navigation or flood control project to the Congress, investigations which form its basis shall be conducted in such a manner as to give to the affected States, during the course of the investigation, information developed by the investigation and an opportunity for consultation, and that the Chief of Engineers shall transmit a copy of his proposed report to each affected State for comment, and that the report together with the submitted views and recommendations of affected States shall be transmitted to the Congress. This is a wise requirement, for our vital water resources can best be conserved and utilized in the public interest if the Federal Government cooperates with State and local governments in the development of those resources by giving adequate consideration to the views of affected States in formulating proposals for projects. This has not been done with respect to these two projects.

In addition, procedures for review consistent with other statutory requirements have been established under Executive Order 9384, which provides for review of project reports within the executive branch before they are submitted to the Congress.

To carry out the requirements of existing law and Executive Order 8384, the Corps of Engineers has established a procedure for the construction, authorization, and ultimate construction of river and harbor and flood control projects. This established procedure, which is well known, has been published by the Corps of Engineers, and the parts



thereof pertinent to the preparation and submission of reports to the Congress are as follows:

Step No. 1. *Assignment of investigation by Chief of Engineers.*—Whether an investigation is requested of the Chief of Engineers by committee resolution or by authority of an act of Congress, the Chief of Engineers will assign the investigation to an appropriate reporting officer, usually the division engineer in whose territory the area is located. Division engineers further assign the investigation to the proper district engineer. Committee resolutions requesting reviews by the Board of Engineers for Rivers and Harbors are first referred to the Board before the investigation is assigned. However, before work can be undertaken on an investigation, funds for that purpose must be appropriated by the Congress.

Step No. 2. *Public hearings by district engineer.*—The district engineer, in order to ascertain the views and desires of local people, will hold public hearings as appropriate at localities accessible to all concerned. Local interests will be afforded full opportunity to express their views on the character and extent of the improvement desired and on the need and advisability of its execution. A hearing in connection with cooperative beach erosion studies will be optional with the reporting offices and the cooperating agency.

Step No. 3. *Investigation by district engineer.*—The district engineer after carefully analyzing the data obtained from local interests and developed through field and office studies, will devise a plan of improvement best suited for problems under consideration and the area in question. During development of the plan of improvement, consideration will be given to optimum use of all water resources of the area by providing allied improvements. A favorable recommendation by the district engineer will depend on whether the benefits to be derived through the plan of improvement exceed the costs to be incurred.

Step No. 4. *Review of division engineer and issuance of public notice.*—Upon completion of the report by the district engineer, the division engineer having jurisdiction will review the report and transmit it to the Chief of Engineers with a draft of the proposed public notice to be issued by him. After approval by the Chief of Engineers, the public notice will be mailed to all parties known to be interested in the investigation, setting forth the findings of the district and division engineers and their recommendations for improvement, and informing those concerned that they may appear before the Board of Engineers for Rivers and Harbors or the Beach Erosion Board to present their views on the matter. The Chief of Engineers will then refer the report to the Board of Engineers for Rivers and Harbors or to the Beach Erosion Board for review as required by law.

Step No. 5. *Review and hearings by Engineer Boards.*—The Chief of Engineers, after the public notice has been issued, refers the report to the Board of Engineers for review as

required by existing law. The Board of Engineers for Rivers and Harbors, an independent body with separate staff in Washington, D.C., is required by law to review all survey and review reports except beach erosion reports. The Beach Erosion Board, also an independent body and staff in Washington, D.C., is the review board for beach erosion studies. These Boards may hold public hearings before making recommendations to the Chief of Engineers.

*Step No. 6. Preparation of proposed report of the Chief of Engineers and review thereof by the affected States and Federal agencies.*—When the Board concerned completes its review of the report and transmits its recommendation to the Chief of Engineers, the latter will prepare his proposed report and will refer it, with the Board's report, to the Governors of the affected States and to other interested Federal agencies in order to obtain their views and recommendations on the improvements discussed in the report. The Federal agencies involved may include the Departments of Agriculture, Commerce, Interior, Labor, and Health, Education, and Welfare; the Federal Power Commission; and interested branches of the Department of Defense. The States and the other Federal agencies normally will be expected to forward their comments on the proposed report to the Chief of Engineers within 90 days.

*Step No. 7. Transmittal of report to Bureau of the Budget.*—After the Chief of Engineers receives the comments of the Governors of the affected States and those of other interested Federal agencies, the Secretary of the Army will submit a draft of his letter of transmission to Congress, with the report of the Chief of Engineers and all pertinent papers, to the Director of the Bureau of the Budget for a determination of the relationship of the report to the program of the President.

*Step No. 8. Transmittal of Report to Congress.*—Upon receipt of the comments of the Bureau of the Budget, the Chief of Engineers will submit his report, together with all allied papers and comments, to the Secretary of the Army, who will transmit it to Congress. This step will complete the action required of the Chief of Engineers and the Department of the Army insofar as compliance with the congressional resolution or act authorizing the investigation is concerned.

In section 202 of the River and Harbor and Flood Control Act of 1954, it is declared to be the policy of the Congress that:

No project or any modification not authorized, of a project for flood control or rivers and harbors, shall be authorized by the Congress unless a report for such project or modification has been previously submitted by the Chief of Engineers, U.S. Army, in conformity with existing law.

The authorization of these two projects at this time would violate this declared policy of the Congress.



*Newark Bay, Hackensack, and Passaic Rivers, N.J. (Channels to Port Elizabeth)*

The Corps of Engineers was directed to make a review report on this project by resolutions of the Public Works Committees of the U.S. Senate and House of Representatives adopted June 14, 1960, and July 31, 1957, respectively. The incomplete report of the Corps of Engineers contemplates the modification of an existing project for Newark, Hackensack, and Passaic Rivers, N.J., to provide for Federal maintenance to a depth of 35 feet of the channels to Port Elizabeth which have been or are planned to be dredged by the Port of New York Authority or other responsible agency, at an estimated annual cost to the Federal Government of \$230,500.

A report prepared by the District Engineer was submitted to the Board of Engineers for Rivers and Harbors. The report was not acceptable to the Board with respect to the measurement of benefits to be derived from the project and the determination of Federal interest in the project, and the report was sent back to the District Engineer, where it now lodges. Obviously, this report has not met the requirements of existing law and the administrative procedures established under such law and Executive Order 9384. The report has not been approved by the Board of Engineers for Rivers and Harbors; the Chief of Engineers has not prepared his proposed report and referred it, with the Board's report, to the Governors of affected States and other interested Federal agencies for comments and recommendations; the report, with all pertinent papers, has not been sent to the Bureau of the Budget for review; and the report has not been submitted to the Congress. In fact, the last action taken on this report was a determination by the Board that the report was unacceptable in two particulars. Nevertheless, over the objection of the undersigned, the majority of the Committee on Public Works included this report in H.R. 13273.

*Fire Island Inlet and shore westerly to Jones Inlet, N.Y.*

The review report on this project has not advanced even as far as the one for Newark Bay, Hackensack, and Passaic Rivers, N.J. A report prepared by the District Engineer has been submitted to the Office of the Chief of Engineers, but it has not yet been referred to the Beach Erosion Board, and, of course, none of the subsequent steps, outlined hereinbefore, have been accomplished, including the securing of comments and recommendations of the affected States and assurances of local cooperation, which are essential for this project.

The considered plan of improvement would provide for Federal participation in the construction of a long-term solution of the erosion problem from Fire Island Inlet westerly to Jones Inlet, N.Y., to consist generally of either an offshore breakwater or a jetty extension to trap littoral drift, placement of sand to restore the beach, provision of feeder beach areas to nourish downdrift shores, and periodic transfer of sand from lee of the breakwater or jetty to feeder beaches. At the present time the Chief of Engineers is unable to determine definitely either the costs or the economic justifications for the long-term plans. A witness, representing the Corps of Engineers, testified before the Subcommittee on Rivers and Harbors that preliminary cost estimates ranged between \$11.4 and \$17.9 million; however, there is no assurance



that the cost will fall within this wide range. Furthermore, the Department of the Army in its report, dated August 3, 1962, on H.R. 12049, a bill to authorize this same project, said, "The survey report on this proposal is being processed for transmission by the Secretary of the Army to the Congress. It is recommended that action on authorizing legislation be deferred pending submission to Congress of the completed report of the Chief of Engineers."

The inclusion of this project in the bill violates the declared policy of the Congress to only authorize projects for which a report has been previously submitted by the Chief of Engineers in conformity with existing law, and is a complete departure from the time-tested standards and procedures followed by the Corps of Engineers and the Congress with respect to the review and authorization of water resource projects.

There are reports on other projects in various stages of completion in which many Members of Congress are interested, and it would be unfair to such other Members to select these two projects for preferential treatment.

#### CONTROVERSIAL PROJECTS ON WHICH OPPONENTS WERE DENIED AN OPPORTUNITY TO BE HEARD

##### *Burns Creek Dam and Reservoir, Snake River, Idaho*

Authorization of the Burns Creek Dam and Reservoir on the upper Snake River in Idaho, as contained in title II of this bill, would provide for the construction and operation of a dam and reservoir by the Bureau of Reclamation, Department of the Interior, at a cost of \$52 million to the Federal Government, for purposes of power, irrigation, flood control, recreation, and the preservation and propagation of fish and wildlife. This project was first recommended to the Congress as a Bureau of Reclamation project on April 4, 1957 (H. Doc. No. 147, 85th Cong.). Extensive hearings were held by the House Committee on Interior and Insular Affairs over a period from 1958 to 1961, and on February 7, 1962, the committee by rollcall vote rejected a motion to report the project to the House.

On September 17, 1962, the Secretary of the Army transmitted a report of the Chief of Engineers on this same project to the Congress, and it was referred to the Committee on Public Works. No hearings were held on this project by the Committee on Public Works until September 24, 1962, at which time a representative of the Corps of Engineers testified before the Subcommittee on Flood Control, and later the same day two Members of Congress also testified. One of the Members opposed the project and the other was in favor of it.

This is a highly controversial project that was thoroughly considered by the Committee on Interior and Insular Affairs over a period of 5 years and ultimately rejected by that committee. It is now reported favorably to the House by the Committee on Public Works after receiving testimony for a period not in excess of 1 hour and without affording an opportunity for persons who oppose the project to be heard.

The report of the Corps of Engineers discloses that this project is opposed by the States of Wyoming and Utah; however, no opportunity was given for the Governors or other officials of these States

to testify. A number of responsible persons have written to the committee chairman expressing their opposition to the project and have asked to be heard. However, all of these persons were denied the right to appear before the committee.

In spite of the fact that the House Committee on Interior and Insular Affairs rejected the project after long hearings and full consideration of the matter over a period of 5 years and with complete disregard for the requests of opponents to be heard, the majority of the committee has reported this project to the House over the objection of the undersigned.

*China Gardens Dam and Reservoir, Snake River, Idaho, Oregon, and Washington*

There is also included in title II of the bill authorization for the project for the China Gardens Dam and Reservoir, Snake River, Idaho, Oregon, and Washington, at an estimated cost of \$74,777,000. No hearings were held on this project, for it is a part of the report of the Corps of Engineers on the Columbia River and tributaries. Because of inadequate time to hold hearings on this report, which consists of five large volumes and is quite complex and controversial, the chairman of the subcommittee on Flood Control announced during public hearings that the Columbia River report would not be considered for inclusion in this bill. However, near the conclusion of the subcommittee action on this bill in executive session, an amendment was offered to include the China Gardens Dam and Reservoir. The undersigned, with considerable misgiving, did not oppose this amendment in reliance upon the statement of a representative of the Corps of Engineers, who was present, that there was no opposition to the project.

Subsequently, it was learned that the representative of the Corps of Engineers was mistaken and that this project is controversial. There is a public versus private power issue involved, for a non-Federal entity has a pending license application with the Federal Power Commission for the High Mountain Sheep project upstream, which is also a part of the report of the Corps of Engineers on the Columbia River and tributaries and for which the China Gardens Dam and Reservoir is a reregulating project, and has committed itself to construct the China Gardens project if a license is issued for the High Mountain Sheep project. We are also advised that a serious question exists as to whether the dam will bar migration of fish upstream.

*Committee acted without full knowledge of the facts*

We are not now prepared to arrive at an intelligent decision on the merits of either of these projects and will not be until all the facts are known, and we doubt that a majority of the committee is any better informed. A committee of the Congress has an obligation to the people of the United States to provide a reasonable opportunity for all sides to be heard on controversial projects, so that the committee can judge the projects on their merits and not be stampeded into making decisions which may be inimical to the public interest.

Except for 2 days of hearings on 13 projects by the Subcommittee on Flood Control on May 8 and 9, 1962, no hearings were held by the



committee on rivers and harbors and flood-control projects during the entire two sessions of this Congress until September 6, 1962. Between September 6 and September 24, hearings were held on a total of 138 projects, involving approximately \$2 billion, in an apparent rush to report out a bill during the waning days of this Congress. These hearings were held under directions to hear only witnesses from the Corps of Engineers. Even Members of Congress were generally refused time to be heard and asked to submit statements for the record, although limited exceptions were made to this procedure. Except for one project, no other witnesses were permitted to testify or submit statements for the record. It was originally understood that only noncontroversial projects would be heard because time would not permit hearing other witnesses; however, on the last day of the hearings the Burns Creek Dam and Reservoir project was added to the agenda, and the China Gardens project was first mentioned in executive session. The opponents of these projects have not been permitted to testify, and the committee acted without knowledge of the facts that these persons wish to present.

We feel very strongly that it is improper for a committee of the Congress, when considering a project known to be controversial, to deny persons who oppose the project a reasonable time in which to be heard. Regardless of any personal views that members of a committee may have with respect to a project, if it is controversial and there is an honest difference of opinion between sincere people on both sides of the issue who want to be heard, as Members of Congress, and collectively as a committee of the Congress, we have an obligation to the people of this country to allow time for both opponents and proponents to be heard. If we do not have time, then we should postpone making a decision until we do have time to conduct an adequate hearing and learn all the facts.

#### CONCLUSION

We urge the House to strike from H.R. 13273 all four of the projects heretofore described. No emergency exists, nor are there any other circumstances which warrant a departure from existing law, declared congressional policy, and established procedure for approval at this time of the Newark Bay, Hackensack, and Passaic Rivers project, and the Fire Island Inlet project. Likewise, there is no emergency or other circumstance existing that can justify the Congress approving the Burns Creek project and the China Gardens project at this time without first giving responsible persons, who are opposed to the project and have asked to be heard, a reasonable opportunity to testify.

This is an authorization bill, and none of the latter four projects can be constructed until funds are appropriated therefor. These projects can be considered by the next Congress without any delay in commencement of the projects ultimately approved, and action can then be based upon full knowledge of what is involved. The people of the United States are entitled to expect that before the Congress approves new water resources projects, involving large future financial commitments, that the projects will have been fully studied and reviewed and



that all of the facts are known to the Congress, which is not the case as to these four projects.

JAMES C. AUCHINCLOSS,  
GORDON C. SCHERER,  
WILLIAM C. CRAMER,  
JOHN F. BALDWIN,  
FRED SCHWENGEL,  
EDWIN B. DOOLEY,  
HOWARD W. ROBISON,  
PERKINS BASS,  
WALTER L. McVEY,  
CARLETON J. KING,  
WILLIAM H. HARSHA, Jr.,  
JAMES HARVEY,  
JOHN C. KUNKEL,  
LOUISE G. REECE.









87TH CONGRESS  
2D SESSION

# H. R. 13273

[Report No. 2504]

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## IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 28, 1962

Mr. DAVIS of Tennessee introduced the following bill; which was referred to the Committee on Public Works

OCTOBER 1, 1962

Reported with amendments, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed

[Omit the part struck through and insert the part printed in italic]

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## A BILL

Authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

3               TITLE I—RIVERS AND HARBORS

4       SEC. 101. That the following works of improvement of  
5       rivers and harbors and other waterways for navigation, flood  
6       control, and other purposes are hereby adopted and author-  
7       ized to be prosecuted under the direction of the Secretary of  
8       the Army and supervision of the Chief of Engineers, in ac-  
9       cordance with the plans and subject to the conditions rec-  
10      ommended by the Chief of Engineers in the respective

1 reports hereinafter designated: *Provided*, That the provisions  
2 of section 1 of the River and Harbor Act approved March  
3 2, 1945 (Public Law Numbered 14, Seventy-ninth Con-  
4 gress, first session), shall govern with respect to projects  
5 authorized in this title; and the procedures therein set forth  
6 with respect to plans, proposals, or reports for works of  
7 improvement for navigation or flood control and for irriga-  
8 tion and purposes incidental thereto, shall apply as if herein  
9 set forth in full:

10 NAVIGATION

11 Narraguagus River, Maine: House Document Numbered  
12 530, Eighty-seventh Congress, at an estimated cost of  
13 \$500,000;

14 Carvers Harbor, Vinalhaven, Maine: Senate Document  
15 Numbered 118, Eighty-seventh Congress, at an estimated  
16 cost of \$205,000;

17 Searsport Harbor, Maine: House Document Numbered  
18 500, Eighty-seventh Congress, at an estimated cost of  
19 \$700,000;

20 Portland Harbor, Maine: House Document Numbered  
21 216, Eighty-seventh Congress, at an estimated cost of  
22 \$8,340,000;

23 Kennebunk River, Maine: House Document Numbered  
24 459, Eighty-seventh Congress, at an estimated cost of  
25 \$270,000;

1        Portsmouth Harbor and Piscataqua River, Maine and  
2 New Hampshire: House Document Numbered 482, Eighty-  
3 seventh Congress, at an estimated cost of \$7,500,000;

4        Gloucester Harbor, Massachusetts: House Document  
5 Numbered 341, Eighty-seventh Congress, at an estimated  
6 cost of \$1,100,000;

7        Marblehead Harbor, Massachusetts: House Document  
8 Numbered 516, Eighty-seventh Congress, at an estimated  
9 cost of \$1,752,000;

10       Chelsea Harbor, Massachusetts: House Document Num-  
11 bered 350, Eighty-seventh Congress, at an estimated cost of  
12 \$2,843,000;

13       Dorchester Bay and Neponset River, Massachusetts:  
14 Senate Document Numbered 126, Eighty-seventh Congress,  
15 at an estimated cost of \$7,050,000;

16       Plymouth Harbor, Massachusetts: Senate Document  
17 Numbered 124, Eighty-seventh Congress, at an estimated  
18 cost of \$1,200,000;

19       Pawtuxet Cove, Rhode Island: House Document Num-  
20 bered 236, Eighty-seventh Congress, at an estimated cost  
21 of \$210,000;

22       Little Neck Bay, New York: House Document Num-  
23 bered 510, Eighty-seventh Congress, at an estimated cost  
24 of \$2,185,000;

25       Flushing Bay and Creek, New York: House Document



1   Numbered 551, Eighty-seventh Congress, at an estimated  
2   cost of \$1,695,000;

3       Buttermilk Channel, New York: House Document Num-  
4   bered 483, Eighty-seventh Congress, at an estimated cost  
5   of \$2,226,000;

6       Newark Bay, Hackensack and Passaic Rivers, New  
7   Jersey (channels to Port Elizabeth): Modification of the  
8   existing navigation project authorized by the River and Har-  
9   bor Act of 1954 (Public Law 780, Eighty-third Congress).  
10   House Document Numbered 252, is hereby authorized sub-  
11   stantially in accordance with the plans being prepared by  
12   the Chief of Engineers.

13       Raritan River, New Jersey: House Document Num-  
14   bered 455, Eighty-sixth Congress, maintenance;

15       Lynnhaven Inlet, Bay, and connecting waters, Virginia:  
16   House Document Numbered —, Eighty-seventh Congress, at  
17   an estimated cost of \$1,068,000: *Provided*, That nothing in  
18   this Act shall be construed as authorizing reimbursement to  
19   local interests for the Long Creek-Broad Bay Canal Bridge;

20       Rollinson Channel and channel from Hatteras Inlet to  
21   Hatteras, North Carolina: House Document Numbered 457,  
22   Eighty-seventh Congress, at an estimated cost of \$652,000;

23       Wilmington Harbor, North Carolina: Senate Document  
24   Numbered 114, Eighty-seventh Congress, at an estimated  
25   cost of \$6,370,000;

1 Savannah Harbor, Georgia: Senate Document Num-  
2 bered 115, Eighty-seventh Congress, at an estimated cost  
3 of \$605,000;

4 Key West Harbor, Florida: Senate Document Num-  
5 bered 106, Eighty-seventh Congress, at an estimated cost  
6 of \$820,000;

7 Tampa Harbor, Port Sutton and Ybor Channels, Florida:  
8 House Document Numbered 529, Eighty-seventh Congress,  
9 at an estimated cost of \$997,000;

10 Walter F. George lock and dam, Alabama: Senate  
11 Document Numbered 109, Eighty-seventh Congress, at an  
12 estimated cost of \$500,000;

13 Pensacola Harbor, Florida: House Document Numbered  
14 528, Eighty-seventh Congress, at an estimated cost of  
15 \$424,000;

16 ~~Holt~~ lock and dam, Alabama: The Secretary of the  
17 Army is hereby authorized and directed to cause an immedi-  
18 ate study to be made under the direction of the Chief of  
19 Engineers with a view to providing hydroelectric power  
20 generating facilities in said dam, and such installation of  
21 necessary power facilities is hereby authorized as determined  
22 to be justified by the Secretary of the Army, unless within  
23 the first period of sixty calendar days of continuous session  
24 of the Congress after the date on which the report is sub-  
25 mitted to it such report is disapproved by the Congress.

1        *Holt lock and dam, Alabama: The Secretary of the Army*  
2        *is hereby authorized and directed to cause an immediate study*  
3        *to be made under the direction of the Chief of Engineers with*  
4        *a view to providing hydroelectric power generating facilities*  
5        *in said dam, and his report on such study shall be submitted*  
6        *to the Congress by the Secretary of the Army within the first*  
7        *period of sixty calendar days of continuous session of the*  
8        *Eighty-eighth Congress.*

9        Pascagoula Harbor, Mississippi: House Document Num-  
10       bered 560, Eighty-seventh Congress, at an estimated cost of  
11       \$4,870,000;

12       Mississippi River, Baton Rouge to Gulf of Mexico, Lou-  
13       isiana: Senate Document Numbered 36, Eighty-seventh  
14       Congress, at an estimated cost of \$357,000;

15       Gulf Intracoastal Waterway, Louisiana and Texas:  
16       House Document Numbered 556, Eighty-seventh Congress,  
17       at an estimated cost of \$25,540,000;

18       Calcasieu River Salt Water Barrier, Louisiana: House  
19       Document Numbered 582, Eighty-seventh Congress, at an  
20       estimated cost of \$3,310,000;

21       Mississippi River at Clarksville, Missouri: House Docu-  
22       ment Numbered 552, Eighty-seventh Congress, at an esti-  
23       mated cost of \$103,300;

24       Sandy Slough, Lincoln County, Missouri: House Docu-



1 ment Numbered 419, Eighty-seventh Congress, at an esti-  
2 mated cost of \$195,000;

3 Sabine-Neches Waterway, Texas: House Document  
4 Numbered 553, Eighty-seventh Congress, at an estimated  
5 cost of \$20,830,000;

6 Trinity River, Wallisville Reservoir, Texas: House  
7 Document Numbered 215, Eighty-seventh Congress, at an  
8 estimated cost of \$9,162,000;

9 Gulf Intracoastal Waterway, channel to Palacios,  
10 Texas: House Document Numbered 504, Eighty-seventh  
11 Congress, at an estimated cost of \$818,000;

12 Gulf Intracoastal Waterway, channel to Victoria, Texas:  
13 House Document Numbered 288, Eighty-seventh Congress,  
14 at an estimated cost of \$1,590,000;

15 Illinois Waterway, Illinois and Indiana: House Docu-  
16 ment Numbered 31, Eighty-sixth Congress, at an estimated  
17 cost of \$114,652,000;

18 Kaskaskia River, Illinois: Senate Document Numbered  
19 44, Eighty-seventh Congress, at an estimated cost of \$58,-  
20 200,000;

21 *Lock and dam numbered 3, Big Sandy River, Kentucky,*  
22 *at an esitmated cost not to exceed \$200,000; such work as may*  
23 *be necessary for the repair and restoration of said lock and*  
24 *dam: Provided, That the work authorized herein shall have*

1 *no effect on the condition that local interests shall operate and*  
2 *maintain the structure and related properties as required by*  
3 *the Act of Congress approved August 2, 1946 (60 Stat.*  
4 *1062): And provided further, That there is hereby author-*  
5 *ized to be expended from appropriations heretofore or here-*  
6 *inafter made for such functions administered by the Depart-*  
7 *ment of the Army such funds as may be necessary for the*  
8 *repair and restoration of lock and dam numbered 3 on the*  
9 *Big Sandy River.*

10       Mississippi River between Missouri River and Minne-  
11 apolis, Minnesota: House Document Numbered 513, Eighty-  
12 seventh Congress, at an estimated cost of \$1,205,000;

13       Ontonagon Harbor, Michigan: House Document Num-  
14 bered 287, Eighty-seventh Congress, at an estimated cost  
15 of \$4,741,000;

16       Muskegon Harbor, Michigan: House Document Num-  
17 bered 474, Eighty-seventh Congress, at an estimated cost of  
18 \$609,000;

19       Leland Harbor, Michigan: House Document Numbered  
20 413, Eighty-seventh Congress, at an estimated cost of \$485,-  
21 000;

22       Little Bay De Noc, Gladstone Harbor and Kipling,  
23 Michigan: House Document Numbered 480, Eighty-seventh  
24 Congress, at an estimated cost of \$350,000;

25       Green Bay Harbor, Wisconsin: House Document Num-

bered 470, Eighty-seventh Congress, at an estimated cost of \$4,270,000;

Kenosha Harbor, Wisconsin: House Document Numbered 496, Eighty-seventh Congress, at an estimated cost of \$673,000;

Manitowoc Harbor, Wisconsin: House Document Numbered 479, Eighty-seventh Congress, at an estimated cost of \$719,000;

Milwaukee Harbor, Wisconsin: House Document Numbered 134, Eighty-seventh Congress, at an estimated cost of \$4,029,000;

Calumet Harbor and River, Illinois and Indiana: House Document Numbered —, Eighty-seventh Congress, at an estimated cost of \$11,464,000;

Chicago Harbor, Illinois: House Document Numbered 485, Eighty-seventh Congress, at an estimated cost of \$1,505,000;

New Buffalo Harbor, Michigan: House Document Numbered 481, Eighty-seventh Congress, at an estimated cost of \$667,000;

Caseville Harbor, Michigan: House Document Numbered 64, Eighty-seventh Congress, at an estimated cost of \$327,000;

Saginaw River, Michigan: House Document Numbered



1 544, Eighty-seventh Congress, at an estimated cost of  
2 \$4,780,000;

3 Rouge River, Michigan: House Document Numbered  
4 509, Eighty-seventh Congress, at an estimated cost of  
5 \$257,000;

6 Huron Harbor, Ohio: House Document Numbered 165,  
7 Eighty-seventh Congress, at an estimated cost of \$8,557,000;

8 Cleveland Harbor, Ohio: House Document Numbered  
9 527, Eighty-seventh Congress, at an estimated cost of  
10 \$888,000;

11 Conneaut Harbor, Ohio: House Document Numbered  
12 415, Eighty-seventh Congress, at an estimated cost of  
13 \$6,179,000;

14 Erie Harbor, Pennsylvania: House Document Num-  
15 bered 340, Eighty-seventh Congress, at an estimated cost  
16 of \$671,000;

17 Buffalo Harbor, New York: House Document Num-  
18 bered 451, Eighty-seventh Congress, at an estimated cost  
19 of \$2,797,000;

20 Great Sodus Bay Harbor, New York: House Document  
21 Numbered 138, Eighty-seventh Congress, at an estimated  
22 cost of \$765,000;

23 Oswego Harbor, New York: House Document Num-  
24 bered 471, Eighty-seventh Congress, at an estimated cost  
25 of \$1,180,000;

1 Dana Point Harbor, California: House Document Num-  
2 bered 532, Eighty-seventh Congress, at an estimated cost  
3 of \$3,730,000;

4 Santa Barbara Harbor, California: House Document  
5 Numbered 518, Eighty-seventh Congress, at an estimated  
6 cost of \$3,000,000;

7 Oakland Harbor, California, Fruitvale Avenue Bridge:  
8 Senate Document Numbered 75, Eighty-seventh Congress,  
9 at an estimated cost of \$1,750,000;

10 Oakland Harbor, California: House Document Num-  
11 bered 353, Eighty-seventh Congress, at an estimated cost  
12 of \$6,775,000;

13 Noyo River and Harbor, California: Senate Document  
14 Numbered 121, Eighty-seventh Congress, at an estimated  
15 cost of \$13,231,000;

16 Columbia and Lower Willamette Rivers, Oregon and  
17 Washington: House Document Numbered 203, Eighty-  
18 seventh Congress, at an estimated cost of \$493,000;

19 Columbia and Lower Willamette Rivers below Van-  
20 couver, Washington, and Portland, Oregon: House Document  
21 Numbered 452, Eighty-seventh Congress, at an estimated  
22 cost of \$20,100,000;

23 Tacoma Harbor, Port Industrial and Hylebos Water-  
24 ways, Washington: Senate Document Numbered 104,  
25 Eighty-seventh Congress, at an estimated cost of \$2,460,000;

1 Kingston Harbor, Washington: House Document Num-  
2 bered 417, Eighty-seventh Congress, at an estimated cost  
3 of \$428,000;

4 Swinomish Channel, Washington: House Document  
5 Numbered 499, Eighty-seventh Congress, at an estimated  
6 cost of \$887,000;

7 Kaunakakai Harbor, Molokai, Hawaii: House Docu-  
8 ment Numbered 484, Eighty-seventh Congress, at an esti-  
9 mated cost of \$7,919,000;

10 BEACH EROSION

11 State of New Hampshire: House Document Numbered  
12 416, Eighty-seventh Congress, at an estimated cost of  
13 \$88,000;

14 Fire Island Inlet and shore westerly to Jones Inlet,  
15 Long Island, New York: Modification of the existing beach  
16 erosion control project authorized by the River and Harbor  
17 Act of 1958 (Public Law 500, Eighty-fifth Congress),  
18 House Document Numbered 411, Eighty-fifth Congress, is  
19 hereby authorized substantially in accordance with the plans,  
20 which will include a sand bypassing system at Fire Island  
21 Inlet, being prepared by the Chief of Engineers;

22 Virginia Beach, Virginia: House Document Numbered  
23 382, Eighty-seventh Congress, periodic nourishment;

24 Fort Macon, Atlantic Beach and vicinity, North Caro-



1    lina: House Document Numbered 555, Eighty-seventh Con-  
2    gress, at an estimated cost of \$194,000;

3        Virginia Key and Key Biscayne, Florida: House Docu-  
4    ment Numbered 561, Eighty-seventh Congress, at an esti-  
5    mated cost of \$220,000;

6        Lake Erie shoreline from the Michigan-Ohio State line  
7    to Marblehead, Ohio: House Document Numbered 63.  
8    Eighty-seventh Congress, at an estimated cost of \$658,500;

9        Sheffield Lake Community Park, Sheffield Lake Village,  
10   Ohio: House Document Numbered 414, Eighty-seventh  
11   Congress, at an estimated cost of \$100,300;

12       Ventura-Pierpont Area, California: House Document  
13   Numbered 458, Eighty-seventh Congress, at an estimated  
14   cost of \$515,000.

15       *SEC. 102. (a) The Act approved August 13, 1946, as*  
16   *amended by the Act approved July 28, 1956 (33 U.S.C.*  
17   *426e-h), pertaining to shore protection, is hereby further*  
18   *amended as follows:*

19       *(1) The word "one-third" in section 1(b) is deleted*  
20   *and the word "one-half" is substituted therefor.*

21       *(2) The following is added after the word "located"*  
22   *in section 1(b): ", except that the costs allocated to the*  
23   *restoration and protection of Federal property shall be borne*  
24   *fully by the Federal Government, and further, that Federal*

1 participation in the cost of a project for restoration and pro-  
2 tection of State, county, and other publicly owned shore parks  
3 and conservation areas may be the total cost exclusive of land  
4 costs, when such areas: Include a zone which excludes per-  
5 manent human habitation; include but are not limited to rec-  
6 reational beaches; satisfy adequate criteria for conservation  
7 and development of the natural resources of the environment;  
8 extend landward a sufficient distance to include, where appro-  
9 priate, protective dunes, bluffs, or other natural features  
10 which serve to protect the uplands from damage; and pro-  
11 vide essentially full park facilities for appropriate public  
12 use, all of which shall meet with the approval of the Chief  
13 of Engineers.”

14 (3) The following is added after the word “supple-  
15 mented” in section 1(e): “, or, in the case of a small project  
16 under section 3 of this Act, unless the plan therefor has  
17 been approved by the Chief of Engineers.”

18 (4) Sections 2 and 3 are amended to read as follows:

19 “SEC. 2. The Secretary of the Army is hereby author-  
20 ized to reimburse local interests for work done by them on  
21 authorized projects which individually do not exceed  
22 \$1,000,000 in total cost after initiation of the survey studies  
23 which form the basis for the project: Provided, That the  
24 work which may have been done on the projects is approved

1 by the Chief of Engineers as being in accordance with the  
2 authorized projects: Provided further, That such reimburse-  
3 ment shall be subject to appropriations applicable thereto or  
4 funds available therefor and shall not take precedence over  
5 other pending projects of higher priority for improvements.

6 "SEC. 3. The Chief of Engineers is hereby authorized  
7 to undertake construction of small shore and beach restora-  
8 tion and protection projects not specifically authorized by  
9 Congress, which otherwise comply with section 1 of this Act,  
10 when he finds that such work is advisable, and he is further  
11 authorized to allot from any appropriations heretofore or  
12 hereinafter made for civil works, not to exceed \$3,000,000  
13 for any one fiscal year for the Federal share of the costs  
14 of construction of such projects: Provided, That not more  
15 than \$400,000 shall be allotted for this purpose for any  
16 single project and the total amount allotted shall be sufficient  
17 to complete the Federal participation in the project under  
18 this section including periodic nourishment as provided for  
19 under section 1(c) of this Act: Provided further, That the  
20 provisions of local cooperation specified in section 1 of this  
21 Act shall apply: And provided further, That the work shall  
22 be complete in itself and shall not commit the United States  
23 to any additional improvement to insure its successful opera-  
24 tion, except for participation in periodic beach nourishment



1 *in accordance with section 1(c) of this Act, and as may*  
2 *result from the normal procedure applying to projects author-*  
3 *ized after submission of survey reports.”*

4 *(b) All provisions of existing law relating to surveys of*  
5 *rivers and harbors shall apply to surveys relating to shore*  
6 *protection and any expenses incident and necessary to investi-*  
7 *gation and study shall be paid from funds for “General in-*  
8 *vestigations, civil functions”, Department of the Army, and*  
9 *section 2 of the River and Harbor Act approved July 3,*  
10 *1930, as amended (33 U.S.C. 426), is modified to the extent*  
11 *inconsistent herewith.*

12 *(c) The cost-sharing provisions of this section shall apply*  
13 *in determining the amounts of Federal participation in or*  
14 *payments toward the costs of authorized projects for which the*  
15 *Federal contribution has not been made prior to the date of*  
16 *approval of this Act, and the Chief of Engineers, through the*  
17 *Beach Erosion Board, is authorized and directed to recom-*  
18 *pute the amounts of Federal contribution toward the costs of*  
19 *such projects accordingly.*

20 SEC. ~~102~~ 103. The Secretary of the Army is authorized  
21 to convey 17.94 acres of land located at old lock and dam  
22 numbered 7, Ohio River, to the city of Midland, Pennsyl-  
23 vania, after November 1, 1962, for public park and recrea-  
24 tion purposes, without monetary consideration but subject  
25 to reversion to the United States if not utilized for public

1 park and recreation purposes and further subject to such  
2 flowage rights as may be necessary in the operation of the  
3 New Cumberland lock and dam, Ohio River.

4       SEC. ~~103~~ 104. That the Secretary of the Army is hereby  
5 authorized to reimburse local interests for such work done  
6 by them on the beach erosion projects authorized in section  
7 101, and in other sections of this Act, subsequent to the  
8 initiation of the cooperative studies which form the basis for  
9 the projects: *Provided*, That the work which may have been  
10 done on these projects is approved by the Chief of Engi-  
11 neers as being in accordance with the projects herein  
12 adopted: *Provided further*, That such reimbursement shall  
13 be subject to appropriations applicable thereto or funds  
14 available therefor and shall not take precedence over other  
15 pending projects of higher priority for improvements.

16       SEC. 105. *The body of water designated as the Redondo*  
17 *Beach Harbor, California, shall be known and designated*  
18 *hereafter as the Redondo Beach King Harbor, California.*  
19 *Any law, regulation, map, document, record, or other paper*  
20 *of the United States in which such body of water is referred*  
21 *to shall be held to refer to it as the Redondo Beach King*  
22 *Harbor, California.*

23       SEC. ~~104~~ 106. The Secretary of the Army is hereby au-  
24 thorized and directed to cause surveys to be made at the

1 following named localities and subject to all applicable pro-  
 2 visions of section 10 of the River and Harbor Act of 1950:

3           A ~~channel~~ *Channel* between Point Shirley and Deer  
 4       Island, Massachusetts, at approximately the same loca-  
 5       tion as the former channel commonly known as Shirley  
 6       Gut.

7           Kings Bay Channel, Georgia.

8           Auglaize River in Wapakoneta, Auglaize County,  
 9       Ohio.

10       SEC. ~~105~~ 107. Title I of this Act may be cited as the  
 11       “River and Harbor Act of 1962”.

## 12                           TITLE II—FLOOD CONTROL

13       SEC. 201. That section 3 of the Act approved June  
 14       22, 1936 (Public Law Numbered 738, Seventy-fourth Con-  
 15       gress), as amended by section 2 of the Act approved June  
 16       28, 1938 (Public Law Numbered 761, Seventy-fifth Con-  
 17       gress), shall apply to all works authorized in this title except  
 18       that for any channel improvement or channel rectification  
 19       project, provisions (a), (b), and (c) of section 3 of said  
 20       Act of June 22, 1936, shall apply thereto, and except as  
 21       otherwise provided by law: *Provided*, That the authoriza-  
 22       tion for any flood control project herein adopted requiring  
 23       local cooperation shall expire five years from the date on  
 24       which local interests are notified in writing by the Depart-  
 25       ment of the Army of the requirements of local cooperation,



1 Unless said interests shall within said time furnish assur-  
2 ances satisfactory to the Secretary of the Army that the  
3 required cooperation will be furnished.

4 SEC. 202. The provisions of section 1 of the Act of  
5 December 22, 1944 (Public Law Numbered 534, Seventy-  
6 eighth Congress, second session), shall govern with respect  
7 to projects authorized in this Act, and the procedures therein  
8 set forth with respect to plans, proposals, or reports for  
9 works of improvement for navigation or flood control and  
10 for irrigation and purposes incidental thereto shall apply as  
11 if herein set forth in full.

12 SEC. 203. The following works of improvement for the  
13 benefit of navigation and the control of destructive flood-  
14 waters and other purposes are hereby adopted and author-  
15 ized to be prosecuted under the direction of the Secretary  
16 of the Army and the supervision of the Chief of Engineers  
17 in accordance with the plans in the respective reports here-  
18 inafter designated and subject to the conditions set forth  
19 therein: *Provided*, That the necessary plans, specifications,  
20 and preliminary work may be prosecuted on any project  
21 authorized in this title with funds from appropriations here-  
22 tofore or hereafter made for flood control so as to be ready  
23 for rapid inauguration of a construction program: *Provided*  
24 *further*, That the projects authorized herein shall be initiated  
25 as expeditiously and prosecuted as vigorously as may be con-

1 sistent with budgetary requirements: *And provided further,*  
2 That penstocks and other similar facilities adapted to pos-  
3 sible future use in the development of hydroelectric power  
4 shall be installed in any dam authorized in this Act for con-  
5 struction by the Department of the Army when approved  
6 by the Secretary of the Army on the recommendation of the  
7 Chief of Engineers and the Federal Power Commission.

8 NEW ENGLAND-ATLANTIC COASTAL AREA

9 The project for navigation and hurricane-flood protection  
10 at Wareham-Marion, Massachusetts, is hereby authorized  
11 substantially in accordance with the recommendation of the  
12 Chief of Engineers in House Document Numbered 548,  
13 Eighty-seventh Congress, at an estimated cost of \$3,811,500.

14 The project for navigation and hurricane flood protection  
15 at Point Judith, Rhode Island, is hereby authorized substan-  
16 tially in accordance with the recommendations of the Chief  
17 of Engineers in House Document Numbered 521, Eighty-  
18 seventh Congress, at an estimated cost of \$2,414,000.

19 The project for navigation and hurricane-flood control  
20 protection at Narragansett Pier, Rhode Island, is hereby  
21 authorized substantially in accordance with the recommenda-  
22 tions of the Chief of Engineers in House Document Num-  
23 bered 195, Eighty-seventh Congress, at an estimated cost of  
24 \$1,152,000.

## LONG ISLAND SOUND AREA

The project for hurricane-flood control protection at New London, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 478, Eighty-seventh Congress, at an estimated cost of \$2,401,000.

The project for hurricane-flood protection at Westport, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 412, Eighty-seventh Congress, at an estimated cost of \$217,000.

The project for hurricane-flood protection at Mystic, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 411, Eighty-seventh Congress, at an estimated cost of \$1,490,000.

## HOUSATONIC RIVER BASIN

The project for flood protection on the Naugatuck River at Ansonia-Derby, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 437, Eighty-seventh Congress, at an estimated cost of \$5,620,000.



## 1                   HUDSON RIVER BASIN

2       The project for flood protection on Rondout Creek and  
3 Wallkill River and their tributaries, New York and New  
4 Jersey, is hereby authorized substantially in accordance with  
5 the recommendations of the Chief of Engineers in Senate  
6 Document Numbered 113, Eighty-seventh Congress, at an  
7 estimated cost of \$5,111,000.

## 8                   NEW JERSEY—ATLANTIC COASTAL AREA

9       The project for hurricane-flood protection and beach  
10 erosion control on Raritan Bay and Sandy Hook Bay, New  
11 Jersey, is hereby authorized substantially in accordance with  
12 the recommendations of the Chief of Engineers in House  
13 Document Numbered 464, Eighty-seventh Congress, at an  
14 estimated cost of \$3,097,000.

## 15                   SUSQUEHANNA RIVER BASIN

16       The project for the Juniata River and tributaries,  
17 Pennsylvania, is hereby authorized in accordance with the  
18 recommendations of the Chief of Engineers in House Docu-  
19 ment Numbered 565, Eighty-seventh Congress, but without  
20 the power features, at an estimated cost of \$32,150,000:  
21 *Provided*, That if the Chief of Engineers deems it desirable  
22 he may submit a reexamination report on the power gener-  
23 ating features to the Congress for its consideration.

## 1 DELAWARE RIVER BASIN

2 The project for the comprehensive development of the  
3 Delaware River Basin, New York, New Jersey, Pennsyl-  
4 vania, and Delaware, is hereby authorized substantially in  
5 accordance with the recommendations of the Chief of Engi-  
6 neers, in House Document Numbered 522, Eighty-seventh  
7 Congress, at an estimated cost of \$224,000,000.

## 8 POTOMAC RIVER BASIN

9 The project for the North Branch of the Potomac River,  
10 Maryland and West Virginia, is hereby authorized substan-  
11 tially in accordance with the recommendations of the Chief of  
12 Engineers, in House Document Numbered 469, Eighty-  
13 seventh Congress, at an estimated cost of \$50,965,000.

## 14 MIDDLE ATLANTIC COASTAL AREA

15 The project for hurricane-flood protection at Norfolk,  
16 Virginia, is hereby authorized substantially in accordance  
17 with the recommendations of the Chief of Engineers in House  
18 Document Numbered 354, Eighty-seventh Congress, at an  
19 estimated cost of \$1,537,000.

20 The project for hurricane-flood protection and beach  
21 erosion control at Carolina Beach and vicinity, North Caro-  
22 lina, is hereby authorized substantially in accordance with  
23 the recommendations of the Chief of Engineers in House

1 Document Numbered 418, Eighty-seventh Congress, at an  
2 estimated cost of \$739,000.

3 APALACHICOLA RIVER BASIN, GEORGIA

4 The project for the West Point Reservoir, Chattahoo-  
5 chee River, Georgia, is hereby authorized substantially in ac-  
6 cordance with the recommendations of the Secretary of the  
7 Army and the Chief of Engineers in House Document Num-  
8 bered 570, Eighty-seventh Congress, at an estimated cost of  
9 \$52,900,000.

10 CENTRAL AND SOUTHERN FLORIDA

11 The comprehensive plan for flood control and other  
12 purposes in central and southern Florida, approved in the  
13 Act of June 30, 1948, and subsequent Acts of Congress is  
14 hereby modified to include the following items:

15 The project for south Dade County, Florida, is hereby  
16 authorized substantially in accordance with the recommenda-  
17 tions of the Secretary of the Army and the Chief of Engineers  
18 in Senate Document Numbered 138, Eighty-seventh Con-  
19 gress, at an estimated cost of \$13,388,000;

20 The project for flood protection in the Cutler Drain  
21 Area, Florida, is hereby authorized substantially in accord-  
22 ance with the recommendations of the Chief of Engineers in  
23 Senate Document Numbered 123, Eighty-seventh Congress,  
24 at an estimated cost of \$2,063,000.



## GREEN SWAMP REGION, FLORIDA

The project for the four river basins, Florida, namely the Hillsborough, Oklawaha, Withlacoochee, and Peace Rivers, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 585, Eighty-seventh Congress, at an estimated cost of \$57,760,000.

## PASCAGOULA RIVER BASIN

The project for flood protection on the Chunky Creek, Chickasawhay and Pascagoula Rivers, Mississippi, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 549, Eighty-seventh Congress, at an estimated cost of \$6,740,000.

## LOWER MISSISSIPPI RIVER BASIN

The project for flood control and improvement of the lower Mississippi River, adopted by the Act of May 15, 1928, as amended, is hereby modified and expanded to include construction of certain improvements in Gin and Muddy Bayous, Yazoo River Basin, Mississippi, substantially in accordance with plans on file in the Office, Chief of Engineers, at an estimated cost of \$150,000.

The project for hurricane-flood protection on the Missis-

1   Mississippi River Delta at and below New Orleans, Louisiana, is  
2   hereby authorized substantially in accordance with the rec-  
3   ommendations of the Chief of Engineers in House Docu-  
4   ment Numbered 550, Eighty-seventh Congress, at an esti-  
5   mated cost of \$7,502,000.

6       The project for flood protection on Red River in  
7   Natchitoches and Red River Parishes, Louisiana, is hereby  
8   authorized substantially in accordance with the recommenda-  
9   tions of the Chief of Engineers in House Document Num-  
10   bered 476, Eighty-seventh Congress, at an estimated cost  
11   of \$1,293,000.

12       The lower auxiliary channel, Yazoo River Basin, Mis-  
13   sissippi, a unit in the Mississippi River and tributaries  
14   project, shall hereafter be known and designated as the Will  
15   M. Whittington Auxiliary Channel in honor of the late Mem-  
16   ber of the House of Representatives from the Third District  
17   of Mississippi, and former chairman of the House Public  
18   Works Committee. The Secretary of the Army, acting  
19   through the Chief of Engineers, United States Army, is  
20   hereby authorized and directed to erect appropriate markers  
21   along the auxiliary channel designating the project "The  
22   Will M. Whittington Auxiliary Channel". Any law, regula-  
23   tion, document, or record of the United States in which such  
24   project is designated or referred to under the name of lower  
25   auxiliary channel, Yazoo River Basin, Mississippi, shall be

1 held and considered to refer to such project by the name of  
2 "Will M. Whittington Auxiliary Channel".

3                                   BUFFALO BAYOU

4       The project for flood protection on Vince and Little  
5 Vince Bayous, Texas, is hereby authorized substantially as  
6 recommended by the Chief of Engineers in House Document  
7 Numbered 441, Eighty-seventh Congress, at an estimated  
8 cost of \$2,224,000.

9                                   GULF OF MEXICO

10       The project for hurricane-flood protection at Port Arthur  
11 and vicinity, Texas, is hereby authorized substantially in  
12 accordance with the recommendations of the Chief of Engi-  
13 neers in House Document Numbered 505, Eighty-seventh  
14 Congress, at an estimated cost of \$23,380,000.

15       The project for hurricane-flood protection at Freeport  
16 and vicinity, Texas, is hereby authorized substantially in  
17 accordance with the recommendations of the Chief of Engi-  
18 neers in House Document Numbered 495, Eighty-seventh  
19 Congress, at an estimated cost of \$3,780,000.

20                                   TRINITY RIVER BASIN

21       The project for flood protection on the East Fork of  
22 the Trinity River, Texas, is hereby authorized substantially  
23 in accordance with the recommendations of the Chief of  
24 Engineers in House Document Numbered 554, Eighty-  
25 seventh Congress, at an estimated cost of \$23,760,000.



1       The project for extension of the Fort Worth Floodway,  
2 Texas, is hereby authorized substantially as recommended  
3 by the Chief of Engineers in House Document Numbered  
4 454, Eighty-seventh Congress, at an estimated cost of  
5 \$5,148,000.

6                                   BRAZOS RIVER BASIN

7       The comprehensive plan for the Brazos River Basin,  
8 authorized by the Act of September 3, 1954, as amended  
9 by subsequent Acts of Congress, is hereby further modified to  
10 include the following item, and the monetary authorization  
11 for said comprehensive plan is hereby increased accordingly.

12       The project for the San Gabriel River, Texas, is hereby  
13 authorized substantially in accordance with the recommenda-  
14 tions of the Chief of Engineers in House Document Num-  
15 bered —, Eighty-seventh Congress, at an estimated cost of  
16 \$20,250,000.

17       The project for flood protection on the Clear Fork of  
18 the Brazos River at and in the vicinity of Abilene, Texas, is  
19 hereby authorized substantially as recommended by the Chief  
20 of Engineers in House Document Numbered 506, Eighty-  
21 seventh Congress, at an estimated cost of \$31,200,000.

22                                   TULAROSA BASIN

23       The project for flood protection at Alamogordo, New  
24 Mexico, is hereby authorized substantially in accordance with  
25 the recommendations of the Chief of Engineers in House

1 Document Numbered 473, Eighty-seventh Congress, at an  
2 estimated cost of \$2,040,000.

3 RIO GRANDE BASIN

4 The project for flood protection at Las Cruces, New  
5 Mexico, is hereby authorized substantially as recommended  
6 by the Chief of Engineers in Senate Document Numbered  
7 117, Eighty-seventh Congress, at an estimated cost of  
8 \$3,350,000.

9 ARKANSAS RIVER BASIN

10 The Dardanelle lock and dam, Arkansas River, Ar-  
11 kansas, is hereby modified to provide for construction of a  
12 sewage outfall for the city of Russellville, Arkansas, substan-  
13 tially in accordance with plans of said city, approved by the  
14 Chief of Engineers, at an estimated cost of \$1,400,000.

15 The project for flood protection on Cow Creek, Kansas,  
16 is hereby authorized substantially in accordance with the  
17 recommendations of the Chief of Engineers in House Docu-  
18 ment Numbered 531, Eighty-seventh Congress, at an esti-  
19 mated cost of \$1,560,000.

20 The project for flood protection on the Arkansas River  
21 at Dodge City, Kansas, is hereby authorized substantially  
22 in accordance with the recommendations of the Chief of  
23 Engineers, in House Document Numbered 498, Eighty-  
24 seventh Congress, at an estimated cost of \$2,133,000.

1       The project for improvement of the Verdigris River and  
2   tributaries, Oklahoma and Kansas, is hereby authorized sub-  
3   stantially in accordance with the recommendations of the  
4   Chief of Engineers in House Document Numbered 563,  
5   Eighty-seventh Congress, at an estimated cost of  
6   \$62,400,000.

7       The project for the Kaw Reservoir, Arkansas River,  
8   Oklahoma, is hereby authorized substantially in accordance  
9   with the recommendations of the Chief of Engineers in  
10   Senate Document Numbered 143, Eighty-seventh Congress,  
11   at an estimated cost of \$83,230,000.

12                               WHITE RIVER BASIN

13       The project for flood protection on Village Creek, White  
14   River, and Mayberry Levee Districts, Arkansas, is hereby  
15   modified to provide for construction of a pumping plant, sub-  
16   stantially as recommended by the Chief of Engineers in  
17   House Document Numbered 577, Eighty-seventh Congress,  
18   at an estimated cost of \$1,018,000.

19       The flood protection project for Village Creek, Jackson  
20   and Lawrence Counties, Arkansas, is hereby authorized sub-  
21   stantially as recommended by the Chief of Engineers in  
22   House Document Numbered 352, Eighty-seventh Congress,  
23   at an estimated cost of \$1,968,000.



## RED RIVER BASIN

The project for Lake Kemp, Wichita River, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 144, Eighty-seventh Congress, at an estimated cost of \$6,410,000.

The project providing for the construction of two experimental water quality study projects in the Arkansas-Red River Basins, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 105, Eighty-seventh Congress, at an estimated cost of \$300,000.

The modification of the Broken Bow Reservoir, Mountain Fork River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 137, Eighty-seventh Congress, at an estimated cost of \$23,800,000.

The project for the Clayton and Tuskahoma Reservoirs, Kiamichi River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 145, Eighty-seventh Congress, at an estimated cost of \$29,748,000.

## MISSOURI RIVER BASIN

1

2       The comprehensive plan for the Missouri River Basin,  
3 approved in the Act of June 28, 1938, as amended by  
4 subsequent Acts of Congress, is hereby further modified to  
5 include the following ~~project~~ *projects*, and the monetary au-  
6 thorization for said general comprehensive plan is increased  
7 accordingly.

8

9       (a) The Kaysinger Bluff Reservoir, Osage River,  
10 Missouri, is hereby modified substantially in accordance with  
11 the recommendations of the Chief of Engineers in House  
12 Document Numbered —, Eighty-seventh Congress, at an  
13 estimated additional cost of \$43,245,000: *Provided*, That  
14 nothing in this act shall be construed as authorizing the  
15 acquisition of additional lands for the establishment of a na-  
tional wildlife refuge at the reservoir.

16

17       (b) The project for the Kansas River, Kansas, Ne-  
18 braska, and Colorado, is hereby authorized substantially in  
19 accordance with the recommendations of the Secretary of the  
20 Army and the Chief of Engineers in Senate Document Num-  
21 bered 122, Eighty-seventh Congress, at an estimated cost  
22 of \$88,070,000: *Provided*, That the authorization for the  
23 Woodbine Reservoir on Lyon Creek is deferred at this time,  
24 subject to submission of a new feasibility report by the  
25 Chief of Engineers to the Eighty-eighth Congress, which  
shall take into account the water and related land resource

1 development plans of the Soil Conservation Service, the  
2 Kansas Water Resources Board, and Lyon Creek Water-  
3 shed Joint District Numbered 41, and preparation of said  
4 report is hereby authorized.

5 The project for flood protection on Papillion Creek and  
6 tributaries, Nebraska, is hereby authorized substantially in  
7 accordance with the recommendations of the Chief of Engi-  
8 neers in House Document Numbered 475, Eighty-seventh  
9 Congress, at an estimated cost of \$2,122,000.

10 The project for flood protection on Indian Creek, Iowa,  
11 is hereby authorized substantially in accordance with the  
12 recommendations of the Chief of Engineers in House Docu-  
13 ment Numbered 438, Eighty-seventh Congress, at an esti-  
14 mated cost of \$1,270,000.

15 OHIO RIVER BASIN

16 The project for flood protection on the Kokosing River,  
17 Ohio, is hereby authorized substantially as recommended by  
18 the Chief of Engineers in House Document Numbered 220,  
19 Eighty-seventh Congress, at an estimated cost of \$2,438,000.

20 The project for flood protection on the Mad River above  
21 Huffman Dam, Ohio, is hereby authorized substantially in  
22 accordance with the recommendations of the Chief of Engi-  
23 neers in House Document Numbered 439, Eighty-seventh  
24 Congress, at an estimated cost of \$7,930,000.



1       The project for the Kentucky River, Kentucky, is here-  
2 by authorized substantially in accordance with the recom-  
3 mendations of the Chief of Engineers, in House Document  
4 Numbered 423, Eighty-seventh Congress, at an estimated  
5 cost of \$26,020,000.

6       The project for flood protection on the Buckhannon  
7 River, West Virginia, is hereby authorized substantially in  
8 accordance with the recommendations of the Chief of Engi-  
9 neers in Senate Document Numbered 43, Eighty-seventh  
10 Congress, at an estimated cost of \$1,206,000.

11       The project for the Guyandot River and tributaries,  
12 West Virginia, is hereby authorized substantially in accord-  
13 ance with the recommendations of the Chief of Engineers in  
14 House Document Numbered 569, Eighty-seventh Congress,  
15 second session, at an estimated cost of \$60,477,000.

16       The project for Twelvepole Creek, West Virginia, is  
17 hereby authorized substantially in accordance with the rec-  
18 ommendations of the Chief of Engineers, in House Document  
19 Numbered 520, Eighty-seventh Congress, at an estimated  
20 cost of \$11,000,000.

21       The project for flood protection on Crab Creek at  
22 Youngstown, Ohio, is hereby authorized substantially in  
23 accordance with the recommendations of the Chief of Engi-  
24 neers in House Document Numbered 440, Eighty-seventh  
25 Congress, at an estimated cost of \$2,268,000.

1       The project for the Scioto River, Ohio, is hereby author-  
2 ized substantially in accordance with the recommendations of  
3 the Chief of Engineers in House Document Numbered —,  
4 Eighty-seventh Congress, at an estimated cost of  
5 \$55,847,000.

6       The project for flood protection on the Allegheny River  
7 at Salamanca, New York, is hereby authorized substantially  
8 in accordance with the recommendations of the Chief of  
9 Engineers in House Document Numbered 166, Eighty-  
10 seventh Congress, at an estimated cost of \$1,390,000.

11       The project for French Creek, Pennsylvania, is hereby  
12 authorized substantially in accordance with the recommenda-  
13 tions of the Chief of Engineers in Senate Document Num-  
14 bered 95, Eighty-seventh Congress, at an estimated cost of  
15 \$23,102,000.

16       The project for the Saline River and tributaries, Illinois,  
17 authorized by the Flood Control Act of 1958 (Public Law  
18 85-500), is hereby modified to provide that no cash con-  
19 tribution shall be required of local interests: *Provided*, That  
20 the other items of local cooperation recommended by the  
21 Chief of Engineers in House Document Numbered 316 of  
22 the Eighty-fourth Congress shall still be applicable.

23                   UPPER MISSISSIPPI RIVER BASIN

24       The project for the Illinois River and tributaries, Illinois,  
25 Wisconsin, and Indiana, is hereby authorized substantially as

1 recommended by the Chief of Engineers in House Document  
2 Numbered 472, Eighty-seventh Congress, at an estimated  
3 cost of \$71,465,000.

4 The project for Rend Lake, Illinois, is hereby authorized  
5 substantially in accordance with the recommendations of the  
6 Chief of Engineers in House Document Numbered 541,  
7 Eighty-seventh Congress, at an estimated cost of \$35,500,000.

8 The project for flood protection on the Mississippi River  
9 at and in the vicinity of Guttenberg, Iowa, is hereby author-  
10 ized substantially in accordance with the recommendations  
11 of the Chief of Engineers in House Document Numbered  
12 286, Eighty-seventh Congress, at an estimated cost of  
13 \$729,000.

14 The project for flood protection on the Mississippi River  
15 between Sainte Genevieve and Saint Marys, Missouri, is  
16 hereby authorized substantially in accordance with the rec-  
17 ommendations of the Chief of Engineers in House Document  
18 Numbered 519, Eighty-seventh Congress, at an estimated  
19 cost of \$2,500,000.

20 The project for the Harrisonville and Ivy Landing  
21 Drainage and Levee District Number 2, Illinois, is hereby  
22 authorized substantially in accordance with the recommenda-  
23 tions of the Chief of Engineers in House Document Num-  
24 bered 542, Eighty-seventh Congress, at an estimated cost  
25 of \$1,112,000.



1       The project for the Columbia Drainage and Levee Dis-  
2 trict Number 3, Illinois, is hereby authorized substantially in  
3 accordance with the recommendations of the Chief of Engi-  
4 neers in House Document Numbered 543, Eighty-seventh  
5 Congress, at an estimated cost of \$986,000.

6       The project for the Prairie DuPont Levee and Sanitary  
7 District, Illinois, is hereby authorized substantially in ac-  
8 cordance with the recommendations of the Chief of Engineers  
9 in House Document Numbered 540, Eighty-seventh Con-  
10 gress, at an estimated cost of \$921,000.

11       The project for flood protection on Richland Creek,  
12 Illinois, is hereby authorized substantially in accordance with  
13 the recommendations of the Chief of Engineers in House  
14 Document Numbered 571, Eighty-seventh Congress, at an  
15 estimated cost of \$4,995,000.

16       The project for the Joanna Reservoir, Salt River,  
17 Missouri, is hereby authorized substantially in accordance  
18 with the recommendations of the Chief of Engineers in House  
19 Document Numbered 507, Eighty-seventh Congress, at an  
20 estimated cost of \$63,300,000.

21       The project for flood protection on the Pecatonica River,  
22 Illinois and Wisconsin, is hereby authorized substantially in  
23 accordance with the recommendations of the Chief of Engi-  
24 neers in House Document Numbered 539, Eighty-seventh  
25 Congress, at an estimated cost of \$850,000.

1       The project for the Mississippi River Urban Areas from  
2 Hampton, Illinois, to Cassville, Wisconsin, is hereby author-  
3 ized substantially in accordance with the recommendations  
4 of the Chief of Engineers in House Document Numbered 450,  
5 Eighty-seventh Congress, at an estimated cost of \$5,350,000.

6       The project for the Kickapoo River, Wisconsin, is hereby  
7 authorized substantially as recommended by the Chief of  
8 Engineers in House Document Numbered 557, Eighty-  
9 seventh Congress, at an estimated cost of \$15,570,000.

10       The project for flood protection on the Warroad River  
11 and Bull Dog Creek, Minnesota, is hereby authorized sub-  
12 stantially in accordance with the recommendations of the  
13 Chief of Engineers in House Document Numbered 449,  
14 Eighty-seventh Congress, at an estimated cost of \$972,000.

15                                   GREAT LAKES BASIN

16       The project for flood protection on the River Rouge,  
17 Michigan, is hereby authorized substantially in accordance  
18 with the recommendations of the Chief of Engineers in House  
19 Document Numbered 148, Eighty-seventh Congress, at an  
20 estimated cost of \$8,659,000.

21       The project for flood protection on the Sandusky River,  
22 Ohio, is hereby authorized substantially in accordance with  
23 the recommendations of the Chief of Engineers in Senate  
24 Document Numbered 136, Eighty-seventh Congress, at an  
25 estimated cost of \$4,300,000.

## TRUCKEE RIVER BASIN

The project for flood protection on the Truckee River and tributaries, California and Nevada, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 435, Eighty-seventh Congress, at an estimated cost of \$2,385,000.

## SAN FRANCISCO BAY AREA

The project for flood protection on Alameda Creek, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 128, Eighty-seventh Congress, at an estimated cost of \$14,680,000.

The project for Corte Madera Creek, Marin County, California, is hereby authorized substantially in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers in House Document Numbered 545, Eighty-seventh Congress, at an estimated cost of \$5,534,000.

## SAN JOAQUIN RIVER BASIN

The New Melones project, Stanislaus River, California, authorized by the Flood Control Act approved December 22, 1944 (58 Stat. 887), is hereby modified substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 453, Eighty-seventh Congress, at an estimated cost of \$113,717,000: *Provided*, That upon completion of construction of the dam



1 and powerplant by the Corps of Engineers, the project shall  
2 become an integral part of the Central Valley project and  
3 be operated and maintained by the Secretary of the Interior  
4 pursuant to the Federal reclamation laws, except that the  
5 flood control operation of the project shall be in accordance  
6 with the rules and regulations prescribed by the Secretary  
7 of the Army: *Provided further*, That the Stanislaus River  
8 Channel, from Goodwin Dam to the San Joaquin River,  
9 shall be maintained by the Secretary of the Army to a  
10 capacity of at least ~~five~~ *eight* thousand cubic feet per second  
11 subject to the condition that responsible local interests agree  
12 to maintain private levees and to prevent encroachment on  
13 the existing channel and floodway between the levees:  
14 *Provided further*, That before initiating any diversions of  
15 water from the Stanislaus River Basin in connection with  
16 the operation of the Central Valley project, the Secretary  
17 of the Interior shall determine the quantity of water required  
18 to satisfy all existing and anticipated future needs within  
19 that basin and the diversions shall at all times be sub-  
20 ordinate to the quantities so determined: *Provided further*,  
21 That the Secretary of the Army adopt appropriate measures  
22 to insure the preservation and propagation of fish and wild-  
23 life in the New Melones project and shall allocate to the  
24 preservation and propagation of fish and wildlife, as pro-  
25 vided in the Act of August 14, 1946 (60 Stat. 1080), an

1 appropriate share of the cost of constructing the Stanislaus  
2 River division and of operating and maintaining the same,  
3 such costs to be nonreimbursable: *Provided further*, That  
4 the Secretary of the Army, in connection with the New  
5 Melones project, construct basic public recreation facilities,  
6 acquire land necessary for that purpose, the cost of con-  
7 structing such facilities and acquiring such lands to be non-  
8 reimbursable and nonreturnable: *Provided further*, That  
9 contracts for the sale and delivery of the additional electric  
10 energy available from the Central Valley project power  
11 system as a result of the construction of the plants herein  
12 authorized and their integration with that system shall be  
13 made in accordance with preferences expressed in the Federal  
14 reclamation laws except that a first preference, to the extent  
15 of 25 per centum of such additional energy, shall be given,  
16 under reclamation law, to preference customers in Tuolumne  
17 and Calaveras Counties, California, for use in that county,  
18 who are ready, able, and willing, within twelve months  
19 after notice of availability by the Secretary of the Interior,  
20 to enter into contracts for the energy and that Tuolumne  
21 and Calaveras County preference customers may exercise  
22 their option in the same date in each successive fifth year  
23 providing written notice of their intention to use the energy  
24 is given to the Secretary not less than eighteen months prior  
25 to said dates: *And provided further*, That the Secretary of

1 the Army give consideration during the preconstruction  
2 planning for the New Melones project to the advisability  
3 of including storage for the regulation of streamflow for the  
4 purpose of downstream water quality control.

5 The Hidden Reservoir, Fresno River, California, is  
6 hereby authorized substantially in accordance with the recom-  
7 mendations of the Chief of Engineers in Senate Document  
8 Numbered 37, Eighty-seventh Congress, at an estimated cost  
9 of \$14,338,000.

10 The Buchanan Reservoir, Chowchilla River, California,  
11 is hereby authorized substantially in accordance with the  
12 recommendations of the Chief of Engineers in Senate Docu-  
13 ment Numbered 98, Eighty-seventh Congress, at an esti-  
14 mated cost of \$13,585,000.

15 RUSSIAN RIVER BASIN

16 The project for Russian River, Dry Creek, California,  
17 is hereby authorized substantially in accordance with the  
18 recommendations of the Chief of Engineers in House Docu-  
19 ment Numbered 547, Eighty-seventh Congress, at an esti-  
20 mated cost of \$42,400,000.

21 REDWOOD CREEK BASIN

22 The project for flood protection on Redwood Creek,  
23 Humboldt County, California, is hereby authorized sub-  
24 stantially in accordance with the recommendations of the



1 Chief of Engineers in House Document Numbered 497,  
2 Eighty-seventh Congress, at an estimated cost of \$2,580,000.

3 LOS ANGELES RIVER BASIN

4 In addition to previous authorizations, there is hereby  
5 authorized to be appropriated the sum of \$3,700,000 for the  
6 prosecution of the comprehensive plan for the Los Angeles  
7 River Basin approved in the Act of August 18, 1941, as  
8 amended and supplemented by subsequent Acts of Congress.

9 ROGUE RIVER BASIN

10 The project for the Rogue River, Oregon and California,  
11 is hereby authorized substantially in accordance with the  
12 recommendations of the Chief of Engineers in House Docu-  
13 ment Numbered 566, Eighty-seventh Congress, at an esti-  
14 mated cost of \$106,700,000: *Provided*, That (a) the project  
15 is located, constructed, and operated to accomplish the bene-  
16 fits as set forth and described in the report of the district  
17 engineer and its appended report; (b) water for all purposes  
18 shall be released in the quantities and qualities at points  
19 described in the district engineer's report and its appendixes;  
20 (c) in the years of short water supply all water users will  
21 share the available water in the same proportions that they  
22 would share the total full supply when it is available and that  
23 no further water-use allocations will be made from the author-  
24 ized storage so as to retain the maximum possible benefits to

1 authorized uses during the periods of adversity when storage  
2 shortages occur.

3 COLUMBIA RIVER BASIN

4 The project for the Burns Creek Dam and Reservoir,  
5 Snake River, Idaho, is hereby authorized substantially in  
6 accordance with the recommendations of the Chief of Engi-  
7 neers in Senate Document Numbered 130, Eighty-seventh  
8 Congress, at an estimated cost of \$52,000,000.

9 The project for the Ririe Dam and Reservoir, Willow  
10 Creek, Idaho, is hereby authorized substantially in accord-  
11 ance with the recommendations of the Chief of Engineers  
12 in House Document Numbered 562, Eighty-seventh Con-  
13 gress, at an estimated cost of \$7,027,000.

14 The project for the Blackfoot Dam and Reservoir, Black-  
15 foot River, Idaho, is hereby authorized substantially in  
16 accordance with the recommendations of the Chief of Engi-  
17 neers in House Document Numbered 568, Eighty-seventh  
18 Congress, at an estimated cost of \$829,000.

19 The project for the Asotin Dam and Reservoir, Snake  
20 River, Idaho and Washington, is hereby authorized substan-  
21 tially in accordance with the recommendations of the Chief  
22 of Engineers in House Document Numbered 403, Eighty-  
23 seventh Congress, at an estimated cost of \$99,818,000.

24 The project for the China Gardens Dam and Reservoir,  
25 Snake River, Idaho, Oregon, and Washington, is hereby

1 authorized substantially in accordance with the recommenda-  
2 tions of the Chief of Engineers in House Document Num-  
3 bered 403, Eighty-seventh Congress, at an estimated cost  
4 of \$74,777,000.

5 COOK INLET, ALASKA

6 The project for Bradley Lake, Cook Inlet, Alaska, is  
7 hereby authorized substantially in accordance with the rec-  
8 ommendations of the Chief of Engineers in House Document  
9 Numbered 455, Eighty-seventh Congress, at an estimated  
10 cost of \$45,750,000.

11 SEC. 204. That section 205 of the Flood Control Act of  
12 1948, as amended (33 U.S.C. 701s), is amended by, (a)  
13 striking out "\$10,000,000" and inserting "\$25,000,000"  
14 in lieu thereof, (b) substituting for the term "small flood  
15 control projects" the term "small projects for flood control  
16 and related purposes", and (c) striking out "*Provided, That*  
17 not more than \$400,000 shall be allotted for this purpose at  
18 any single locality from the appropriations for any one  
19 fiscal year" and inserting in lieu thereof "*Provided, That*  
20 not more than \$2,000,000 shall be allotted under this section  
21 for a project at any single locality and the amount allotted  
22 shall be sufficient to complete Federal participation in the  
23 project: *And provided further, That* no construction shall be  
24 undertaken on any project under the provisions of this section  
25 with a Federal cost in excess of \$1,000,000 unless such



1 project has been approved by resolutions adopted by the  
2 Committee on Public Works of the Senate and the Com-  
3 mittee on Public Works of the House of Representatives,  
4 respectively.”

5 SEC. 205. The consent of Congress is hereby granted to  
6 Duke Power Company, its successors and assigns, to con-  
7 struct, maintain, and operate a dam across Savannah River  
8 between Anderson County, South Carolina, and Elbert  
9 County, Georgia, near Middleton Shoals, and about two  
10 hundred and ninety-seven miles above the mouth of said river,  
11 for the purpose of providing a pool for condenser water for  
12 a steam-electric plant. Construction on such dam shall not  
13 be commenced until the plans therefor have been submitted  
14 to and approved by the Chief of Engineers, United States  
15 Army, and by the Secretary of the Army, and when such  
16 plans have been approved by the Chief of Engineers and  
17 by the Secretary of the Army, there shall be no deviation  
18 from such plans either before or after completion of said dam  
19 unless the modification of such plans has previously been  
20 submitted to and approved by the Chief of Engineers and  
21 the Secretary of the Army. In approving the plans for said  
22 dam such conditions and stipulations may be imposed as the  
23 Chief of Engineers and the Secretary of the Army may deem  
24 necessary to protect the present and future interest of the  
25 United States. Nothing in this section shall be construed to

1 authorize the use of such dam to develop water power or  
2 generate hydroelectric energy. The grantee and its suc-  
3 cessors shall hold and save the United States free from  
4 all claims arising from damage which may be sustained by  
5 the dam herein authorized, or damage sustained by the ap-  
6 purtenances of the said dam, by reason of the future con-  
7 struction and operation by the United States of Hartwell  
8 Reservoir or any other Federal project upstream or down-  
9 stream from the dam herein authorized. The authority  
10 granted by this section shall cease and be deemed null and  
11 void unless the actual construction of the dam hereby author-  
12 ized is commenced within four years and completed within  
13 seven years from the date of approval of this section. The  
14 right to alter, amend, or repeal this section is hereby ex-  
15 pressly reserved.

16 SEC. 206. The Secretary of the Army is hereby author-  
17 ized and directed to cause surveys for flood control and allied  
18 purposes, including channel and major drainage improve-  
19 ments, and floods aggravated by or due to wind or tidal  
20 effects, to be made under the direction of the Chief of Engi-  
21 neers, in drainage areas of the United States and its terri-  
22 torial possessions, which include the following named local-  
23 ities: *Provided*, That after the regular or formal reports  
24 made on any survey are submitted to Congress, no supple-  
25 mental or additional report or estimate shall be made unless

1 authorized by law except that the Secretary of the Army  
2 may cause a review of any examination or survey to be made  
3 and a report thereon submitted to Congress, if such review  
4 is required by the national defense or by changed physical  
5 or economic conditions: *Provided further*, That the Govern-  
6 ment shall not be deemed to have entered upon any project  
7 for the improvement of any waterway or harbor mentioned  
8 in this title until the project for the proposed work shall  
9 have been adopted by law:

10           Waccasassa River (Levy County and Gilchrist  
11           County), Florida.

12           Valenciana River, Puerto Rico.

13           Lake Pontchartrain, north shore, Louisiana.

14           San Bernard River, Texas.

15           Clear Creek, Texas.

16           Peytons Creek and tributaries, Texas.

17           Sacramento River Basin and streams in northern  
18           California draining into the Pacific Ocean for the pur-  
19           poses of developing, where feasible, multiple-purpose  
20           water resource projects, particularly those which would  
21           be eligible under the provisions of title III of Public  
22           Law 85-500.

23           Battle Creek, Sacramento River, California.

24           All streams in Santa Barbara County, California,



- 1       draining the Santa Ynez Mountains, except Santa Ynez
- 2       River and tributaries.
- 3       SEC. 207. Title II of this Act may be cited as the “Flood
- 4   Control Act of 1962”.

87TH CONGRESS  
2d Session

**H. R. 13273**

[Report No. 2504]

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# **A BILL**

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Authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

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By Mr. DAVIS of Tennessee

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SEPTEMBER 28, 1962

Referred to the Committee on Public Works

OCTOBER 1, 1962

Reported with amendments, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed







# Digest of CONGRESSIONAL PROCEEDINGS

## OF INTEREST TO THE DEPARTMENT OF AGRICULTURE

OFFICE OF  
BUDGET AND FINANCE

(For information only;  
should not be quoted  
or cited)

Issued Oct. 3, 1962  
For actions of Oct. 2, 1962  
87th-2d, No. 179

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**HIGHLIGHTS:** House received conference report on agricultural appropriation bill. House received conference report on foreign trade bill. Both Houses agreed to conference report on tax bill. Conferees agreed to file report on pay bill. Senate passed bills to: Amend Food and Agriculture Act re 15-acre wheat exemption for 1963 crop; Increase limitation on FHA loans. Both Houses received and Senate agreed to conference report on school lunch fund apportionment bill. Senate passed foreign aid appropriation bill. Senate committee reported bill for holding World Food Congress.

### HOUSE

1. **AGRICULTURAL APPROPRIATION BILL, 1963.** Received the further conference report on amendments in disagreement on this bill, H. R. 12648 (H. Rept. 2514). All amendments previously reported in disagreement were still reported in disagreement (pp. 20596, 20650). Attached to this Digest is a copy of the conference committee report.
2. **APPROPRIATIONS.** Conferees were appointed on H. R. 12900, the public works appropriation bill. Senate conferees have already been appointed. p. 20568  
The Appropriations Committee was granted permission to file conference reports at any time. p. 20568



3. PUBLIC WORKS. The Rules Committee reported a resolution for the consideration of H. R. 13273, the public works authorization bill. p. 20650

4. PERSONNEL. The "Daily Digest" states that "Conferees, in executive session, agreed to file a conference report on the differences between the Senate- and House-passed versions of H. R. 7927, providing for postal rate increases and increases in Federal employees' salaries." p. D929

The Post Office and Civil Service Committee reported with amendment H. R. 9531, to amend the law relating to pay for postal employees (H. Rept. 2509). p. 20650

Concurred in the Senate amendment to the House amendment to S. 2697, to amend title 38, U.S.C., to provide an extension of the period within which certain educational programs must be begun and completed in the case of persons called to active duty during the Berlin crisis. This bill will now be sent to the President. p. 20569

Received from Treasury a report of the operations by Federal departments and establishments in connection with the bonding of officers and employees. p. 20650.

5. WATERSHEDS. The Agriculture Committee approved the work plans for the following watersheds: Anasco River, P. R.; Bayou Folse, La.; Bee Creek, Kan.; Big Indian Creek, Neb.; Big Muddy Creek, Ky.; Big Wyacondah, Iowa; Crooked Bayou, Ark.; Duncan Creek, S. C.; Hardin Creek, Tenn.; Kaercher Creek, Penn.; Lattas Creek, Ind.; Line Creek, Tenn.; Lower Forest River, N. Dak.; Middle Caney, Kan.; Neshobe River, Vt.; Saltlick Creek, W. Va.; Stucker Fork, Ind.; Upper Bogue Phalia, Miss.; Upper Quaboag River, Mass.; West Fork of Pine River, Ky.; and Silver Creek, Kan. p. 20571

6. TAXATION. Both Houses agreed to the conference report on H. R. 10650, the proposed Revenue Act of 1962. This bill will now be sent to the President. See Digest No. 150 for items of interest. pp. 20547-65, 20580-92

7. FOREIGN TRADE. Received the conference report on H. R. 11970, the proposed Trade Expansion Act of 1962 (H. Rept. 2518). pp. 20597-601, 20650

The Ways and Means Committee reported with amendment H. R. 12109, to amend the Tariff Act of 1930 to permit certain natural grasses and other natural materials to be imported free of duty (H. Rept. 2516). p. 20650

8. DRUGS. The "Daily Digest" states that "Conferees, in executive session, agree to file a conference report on the differences between the Senate- and House-passed versions of S. 1552, proposed Drug Industry Antitrust Act." p. D929

9. LEGISLATIVE PROGRAM. Rep. Albert announced that the following bills will be considered on Wed.: H. R. 13290, the supplemental appropriation bill; H. R. 13273, the public works authorization bill; S. 1123, to extend certain child labor provisions of the Fair Labor Standards Act to children employed in agriculture; and the conference report on H. R. 11665, the school lunch fund apportionment bill. He further announced that the conference report on the proposed Trade Expansion Act of 1962 will be considered on Thurs. p. 20616

#### SENATE

10. WHEAT. Passed without amendment H. R. 13241, to amend Sec. 309 of the Food and Agriculture Act of 1962 so as to provide that a farm marketing quota on the 1963 crop of wheat shall be applicable to any farm on which acreage of wheat planted exceeds the smaller of 15 acres or the highest number of acres planted to wheat on the farm in calendar years 1959, 1960, 1961, or 1963, (instead of 1959, 1960, or 1961). This bill will now be sent to the President. p. 20492



CONSIDERATION OF H.R. 13273

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OCTOBER 2, 1962.—Referred to the House Calendar and ordered to be printed

---

Mr. COLMER, from the Committee on Rules, submitted the following

R E P O R T

[To accompany H. Res. 823]

The Committee on Rules, having had under consideration House Resolution 823, reports the same to the House with the recommendation that the resolution do pass.



and to the House of Representatives

Mr. Speaker, the Committee on Education and the Arts

The Committee on Education and the Arts

The Committee on Education and the Arts



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# House Calendar No. 347

87<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

## H. RES. 823

[Report No. 2515]

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### IN THE HOUSE OF REPRESENTATIVES

OCTOBER 2, 1962

Mr. COLMER, from the Committee on Rules, reported the following resolution;  
which was referred to the House Calendar and ordered to be printed

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## RESOLUTION

1       *Resolved*, That upon the adoption of this resolution it  
2 shall be in order to move that the House resolve itself into  
3 the Committee of the Whole House on the State of the Union  
4 for the consideration of the bill (H.R. 13273) authorizing  
5 the construction, repair, and preservation of certain public  
6 works on rivers and harbors for navigation, flood control,  
7 and for other purposes. After general debate, which shall  
8 be confined to the bill, and shall continue not to exceed two  
9 hours, to be equally divided and controlled by the chairman  
10 and ranking minority member of the Committee on Public  
11 Works, the bill shall be read for amendment under the five-  
12 minute rule. At the conclusion of the consideration of the



1 bill for amendment, the Committee shall rise and report the  
2 bill to the House with such amendments as may have been  
3 adopted, and the previous question shall be considered as or-  
4 dered on the bill and amendments thereto to final passage  
5 without intervening motion except one motion to recommit.

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**RESOLUTION**

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Providing for the consideration of H.R. 13273,  
a bill authorizing the construction, repair,  
and preservation of certain public works on  
rivers and harbors for navigation, flood con-  
trol, and for other purposes.

---

---

By Mr. COLMER

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OCTOBER 2, 1962

Referred to the House Calendar and ordered to be  
printed



Mr. MADDEN, for 20 minutes, on Thursday and Friday.

Mr. RYAN of New York, for 5 minutes, today.

Mr. O'HARA of Illinois, for 30 minutes on Friday.

Mr. HARDING, for 30 minutes, today.

Mr. ELLSWORTH (at the request of Mr. BARRY), for 10 minutes, on October 4, 1962.

Mr. FARSTEIN (at the request of Mr. HAGAN of Georgia), for 15 minutes, today, and to revise and extend his remarks and include extraneous matter.

Mr. DULSKI (at the request of Mr. HAGAN of Georgia), for 1 hour, on Thursday, October 4.

Mrs. FROST, for 30 minutes, today.

#### EXTENSION OF REMARKS

By unanimous consent, permission to extend remarks in the Appendix of the RECORD, or to revise and extend remarks, was granted to:

Mr. HAYS and to include extraneous matter.

Mr. DORN in two instances and to include extraneous matter.

Mrs. GRIFFITHS in five instances and to include extraneous matter.

Mr. SIKES and to include extraneous matter, notwithstanding it will exceed two pages of the RECORD and is estimated by the Public Printer to cost \$240.

Mr. JAMES C. DAVIS in two instances and to include extraneous matter, notwithstanding that in one instance it will exceed two pages of the RECORD and is estimated by the Public Printer to cost \$480.

Mr. LANE in five instances and to include extraneous matter.

Mr. ADAIR in five instances and to include extraneous matter.

Mrs. BOLTON in five instances and to include extraneous matter.

Mr. TEAGUE of Texas to insert certain correspondence in the RECORD during the consideration of H.R. 8556.

Mr. CURTIS of Missouri in two instances and to include extraneous matter, notwithstanding the fact that in one the extraneous matter will exceed two pages of the RECORD and is estimated by the Public Printer to cost \$240.

Mr. BENNETT of Florida, his remarks during debate on the Roosevelt Memorial Commission resolution, and to include extraneous matter.

Mrs. GREEN of Oregon in five instances and to include extraneous matter.

Mr. RYAN of New York and to include extraneous matter.

Mr. RHODES of Pennsylvania in five instances and to include extraneous matter.

Mr. O'HARA of Illinois in five instances and to include extraneous matter.

Mr. PHILBIN in three instances and to include extraneous matter.

Mr. ASPINALL (at the request of Mrs. FROST) and to include extraneous matter.

Mr. ELLIOTT and to include extraneous matter.

(The following Members (at the request of Mr. BARRY) and to include extraneous matter:)

Mr. DERWINSKI in two instances.

Mr. WESTLAND in two instances.

Mr. WIDNALL in two instances.

Mrs. MAY.

Mr. YOUNGER.

Mr. PELLY in two instances.

Mr. GAVIN in three instances.

Mr. WILSON of California in three instances.

Mr. LIPSCOMB in two instances.

Mr. FULTON in five instances.

Mr. BOW in five instances.

Mr. FRELINGHUYSEN.

Mr. MATHIAS in two instances.

Mr. YOUNGER (at the request of Mr. BARRY) and to include extraneous matter, notwithstanding the fact that it exceeds two pages of the RECORD and is estimated by the Public Printer to cost \$240.

(The following Members (at the request of Mr. HAGAN of Georgia) and to include extraneous matter:)

Mrs. RILEY.

Mr. MORRIS K. UDALL.

Mr. RODINO in three instances.

Mr. GALLAGHER in two instances.

Mr. ROONEY.

Mr. BLATNIK in three instances.

Mr. MORRIS.

Mr. DELANEY.

Mr. KASTENMEIER in three instances.

Mr. STRATTON in two instances.

#### ENROLLED BILLS SIGNED

Mr. BURLESON, from the Committee on House Administration, reported that that committee had examined and found truly enrolled bills of the House of the following titles, which were thereupon signed by the Speaker:

H.R. 6682. An act to provide for the exemption of fowling nets from duty, and for other purposes; and

H.R. 12180. An act to extend for a temporary period the existing provisions of law relating to the free importation of personal and household effects brought into the United States under Government orders, and for other purposes.

#### SENATE ENROLLED BILLS AND JOINT RESOLUTIONS SIGNED

The SPEAKER announced his signature to enrolled bills and joint resolutions of the Senate of the following titles:

S. 699. An act to amend the act entitled "An act to incorporate the Hungarian Reformed Federation of America," approved March 2, 1907, and for other purposes;

S. 3120. An act to amend section 6 of the act of May 29, 1884;

S. 3152. An act to provide for the nutritional enrichment and sanitary packaging of rice prior to its distribution under certain Federal programs, including the national school lunch program;

S. 3156. An act to amend section 142 of title 28, United States Code, with regard to furnishing court quarters and accommodations at places where regular terms of court are authorized to be held, and for other purposes;

S. 3396. An act to amend section 511(h) of the Merchant Marine Act, 1936, as amended, in order to extend the time for commitment of construction reserve funds;

S. 3431. An act to consent to the amendment of the Pacific Marine Fisheries Compact and to the participation of certain ad-

ditional States in such compact in accordance with the terms of such amendment;

S.J. Res. 211. Joint resolution providing for the establishment of an annual National School Lunch Week; and

S.J. Res. 228. Joint resolution authorizing the issuance of gold medal to General of the Army Douglas MacArthur.

#### THE MISSISSIPPI CRISIS

The SPEAKER pro tempore. Under previous order of the House, the gentleman from New York [Mr. RYAN] is recognized for 5 minutes.

(Mr. RYAN of New York asked and was given permission to revise and extend his remarks.)

Mr. RYAN of New York. Mr. Speaker, I rise to commend the President for his courageous leadership in the Mississippi crisis. The Chief Executive acted with patience and wisdom.

All of us, the citizens of every State of the Union, including Mississippi, owe a deep debt to the President and his administration for upholding the sanctity of the law. As the President so ably pointed out:

If this country should ever reach the point where any man or group of men, by force, or threat of force, could long defy the commands of our courts and Constitution, then no law would stand free from doubt, no judge would be sure of his writ, and no citizen would be safe from his neighbors.

It should be carefully pointed out that both the President and the Attorney General used the Federal marshals and Federal troops as a last resort. The Attorney General talked with the Governor of Mississippi to try to persuade him to withdraw from his invalid position of opposition to the Federal courts. His efforts were met with incredible stubbornness and reckless disregard for the national welfare.

The President was equally patient. He watched with a calm eye the futile efforts of his chief law-enforcement officer to persuade a Governor to obey the laws of the United States. Finally, after there was no other way to uphold the law and the Constitution, the President ordered the Federal marshals to see that the law was obeyed.

Under the intelligent leadership of James McShane, Chief U.S. Marshal, the marshals acted with restraint and discretion which redounds to their everlasting credit. Their orders were not to fire into any crowd which might gather. In spite of unbelievable pressure, consisting of a howling mob throwing rocks, sticks, metal, and any object which was available, not a single marshal violated his orders. When there was an obvious and impending threat to lives, the marshals dispelled the crowd with the use of tear gas. There have been reckless charges made concerning the conduct of these brave and dedicated men. I fear that such charges arise from bigotry and self-interest.

Mr. Speaker, the country has survived a great crisis, the greatest test of our Federal system since the Civil War. We were fortunate that in this crisis the President, the Attorney General, and the Federal marshals exhibited great leadership in upholding the cause of liberty.



Mr. WAGGONNER. Mr. Speaker, will the gentleman yield?

Mr. RYAN of New York. I do not yield at this time.

### ADJOURNMENT

Mr. WAGGONNER. Mr. Speaker, I make the point of order that a quorum is not present.

Mr. HARDING. Mr. Speaker, I move that the House do now adjourn.

The motion was agreed to; accordingly (at 6 o'clock and 47 minutes p.m.), under its previous order, the House adjourned until tomorrow, Wednesday, October 3, 1962, at 11 o'clock a.m.

### EXECUTIVE COMMUNICATIONS, ETC.

Under clause 2 of rule XXIV, executive communications were taken from the Speaker's table and referred as follows:

2600. A letter from the Administrative Assistant Secretary of the Interior, transmitting the receipts and expenditures of the Department of the Interior in connection with the administration of section 15 of the Outer Continental Shelf Lands Act for the fiscal year 1962; to the Committee on the Judiciary.

2601. A letter from the Secretary of the Treasury, transmitting a report of the operations by Federal departments and establishments in connection with the bonding of officers and employees under the provisions of 6 U.S.C. 14 for the fiscal year ended June 30, 1962; to the Committee on Post Office and Civil Service.

2602. A letter from the Administrator, National Aeronautics and Space Administration, transmitting a report to the Committee on Science and Astronautics of the House of Representatives pursuant to section 3 of the act of July 21, 1961 (75 Stat. 216, 217), and submitted to the Speaker of the House of Representatives pursuant to rule XL of the rules of the House of Representatives; to the Committee on Science and Astronautics.

2603. A letter from the Administrator, National Aeronautics and Space Administration, transmitting a report to the Committee on Science and Astronautics of the House of Representatives pursuant to section 1(c) of the National Aeronautics and Space Administration Authorization Act for the fiscal year 1963 (76 Stat. 382), and submitted to the Speaker of the House of Representatives pursuant to rule XL of the Rules of the House of Representatives; to the Committee on Science and Astronautics.

2604. A letter from the Secretary of the Army, transmitting a letter from the Chief of Engineers, Department of the Army, dated August 16, 1962, submitting a report, together with accompanying papers and an illustration, on an interim hurricane survey of the Eastern Shore of Virginia, authorized by Public Law 71, 84th Congress, approved June 15, 1955 (H. Doc. No. 599); to the Committee on Public Works and ordered to be printed with one illustration.

2605. A letter from the Secretary of the Army, transmitting a letter from the Chief of Engineers, Department of the Army, dated August 16, 1962, submitting a report, together with accompanying papers and illustrations, on an interim hurricane survey of Fairfield, Conn., authorized by Public Law

71, 84th Congress, approved June 15, 1955. It is also in final response to the Flood Control Act, approved September 3, 1954 (H. Doc. No. 600); to the Committee on Public Works and ordered to be printed with two illustrations.

2606. A letter from the Secretary of the Army, transmitting a letter from the Chief of Engineers, Department of the Army, dated July 25, 1962, submitting a report, together with accompanying papers and illustrations on a review of the reports on the Wynoochee River, Wash., requested by a resolution of the Committee on Public Works, House of Representatives, adopted July 29, 1954 (H. Doc. No. 601); to the Committee on Public Works and ordered to be printed with illustrations.

2607. A letter from the Secretary of the Army, transmitting a letter from the Chief of Engineers, Department of the Army, dated August 8, 1962, submitting a report, together with accompanying papers and illustrations, on a cooperative beach erosion control study of the shore from San Gabriel River to Newport Bay, Orange County, Calif., Appendix V, phase II, authorized by the River and Harbor Act as amended and supplemented, approved July 3, 1930, and a survey of Anaheim Bay, Calif., authorized by the River and Harbor Act of July 3, 1958 (H. Doc. No. 602); to the Committee on Public Works and ordered to be printed with illustrations.

### REPORTS OF COMMITTEES ON PUBLIC BILLS AND RESOLUTIONS

Under clause 2 of rule XIII, reports of committees were delivered to the Clerk for printing and reference to the proper calendar, as follows:

Mr. MORRISON: Committee on Post Office and Civil Service. H.R. 9531. A bill to amend the law relating to pay for postal employees; with amendment (Rept. No. 2509). Referred to the Committee of the Whole House on the State of the Union.

Mr. THOMPSON of New Jersey: Joint Committee on Disposition of Executive Papers. House Report No. 2510. Report on the disposition of certain papers of sundry executive departments. Ordered to be printed.

Mr. POWELL: Committee of conference. H.R. 11665. A bill to revise the formula for apportioning cash assistance funds among the States under the National School Lunch Act, and for other purposes (Rept. No. 2512). Ordered to be printed.

Mr. MACK: Committee on conference. H.R. 7283. A bill to amend the War Claims Act of 1948, as amended, to provide compensation for certain World War II losses (Rept. No. 2513). Ordered to be printed.

Mr. WHITTEN: Committee of conference. H.R. 12648. A bill making appropriations for the Department of Agriculture and related agencies for the fiscal year ending June 30, 1963, and for other purposes (Rept. No. 2514). Ordered to be printed.

Mr. COLMER: Committee on Rules. House Resolution 823. Resolution for consideration of H.R. 13273, a bill authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes, without amendment (Rept. No. 2515). Referred to the House Calendar.

Mr. MILLS: Committee on Ways and Means. H.R. 12109. A bill to amend the Tariff Act of 1930 to permit certain natural grasses and other natural materials to be imported free of duty; with amendment

(Rept. No. 2516). Referred to the Committee of the Whole House on the State of the Union.

Mr. POWELL: Committee on Education and Labor. H.R. 13204. A bill to amend the National Defense Education Act of 1958 to raise the limit on Federal payments into student loan funds, to broaden the types of equipment which may be acquired with Federal grants and loans under title III thereof, and for other purposes; with amendment (Rept. No. 2517). Referred to the Committee of the Whole House on the State of the Union.

Mr. MILLS: Committee of conference. H.R. 11970. A bill to promote the general welfare, foreign policy, and security of the United States through international trade agreements and through adjustment assistance to domestic industry, agriculture, and labor, and for other purposes (Rept. No. 2518). Ordered to be printed.

### REPORTS OF COMMITTEES ON PRIVATE BILLS AND RESOLUTIONS

Under clause 2 of rule XIII, reports of committees were delivered to the Clerk for printing and reference to the proper calendar, as follows:

Mr. DAVIS of Tennessee: Committee on Public Works. S. 1563. An act to authorize the conveyance of certain lands within the Clark Hill Reservoir, Savannah River, Ga.-S.C., to the Georgia-Carolina Council, Inc., Boys Scouts of America, for recreation and camping purposes; without amendment (Rept. No. 2511). Referred to the Committee of the Whole House.

### PUBLIC BILLS AND RESOLUTIONS

Under clause 4 of rule XXII, public bills and resolutions were introduced and severally referred as follows:

By Mr. HALEY:

H.R. 13302. A bill to amend chapter 15 of title 38, United States Code, to revise the pension program for World War I, World War II, and Korean conflict veterans, and for other purposes; to the Committee on Veterans' Affairs.

By Mr. LIBONATTI:

H.R. 13303. A bill to amend chapter 15 of title 38, United States Code, to revise the pension program for World War I, World War II, and Korean conflict veterans, and for other purposes; to the Committee on Veterans' Affairs.

By Mr. McFALL:

H.R. 13304. A bill to amend section 2304 of title 10, United States Code, to provide that military procurement of fluid milk from distributors shall be under such conditions as to insure that dairy farmers will receive not less than minimum prices established under State law; to the Committee on Armed Services.

By Mr. GONZALEZ:

H.R. 13305. A bill to assist the States in carrying out on a continuing basis in-service training program for State and local government officials and employees with a view to increasing efficiency and economy in the operation of State and local governments, including the District of Columbia, the Commonwealth of Puerto Rico and the territorial possessions of the United States, and encouraging the highest standards of performance in the transaction of the public business; to the Committee on Education and Labor.







# Digest of CONGRESSIONAL PROCEEDINGS

OF INTEREST TO THE DEPARTMENT OF AGRICULTURE

OFFICE OF  
BUDGET AND FINANCE

(For information only;  
should not be quoted  
or cited)

Issued Oct. 4, 1962  
For actions of Oct. 3, 1962  
87th-2d, No. 180

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HIGHLIGHTS: Sen. Miller criticized farm program. Sen. Humphrey commended dairy donation program. Sen. Morse inserted article on dangers in use of pesticides. Senate passed bill for holding World Food Congress. Sen. Burdick commended transportation industry in moving grain crop. Sen. Humphrey expressed regret over failure to pass Youth Conservation Corps bill. Sen. Morse defended location of forest fire research laboratories. Senate passed State-Justice-Commerce appropriation bill. House committee reported wilderness bill. House passed supplemental appropriation bill. House committee reported bill for holding World Food Congress. Both Houses received and Senate agreed to conference report on pay bill.

## HOUSE

1. WILDERNESS. The Interior and Insular Affairs Committee reported with amendment H. R. 776, to establish a national wilderness preservation system for the permanent good of the whole people (H. Rept. 2521). p. 20787
2. FOOD CONGRESS. The Foreign Affairs Committee reported without amendment H. R. 13307, authorizing an appropriation to enable the U. S. to extend an invitation to the Food and Agriculture Organization of the U. N. to hold a World Food Congress in the U. S. in 1963 (H. Rept. 2524). p. 20787
3. MONOPOLIES. The Rules Committee reported a resolution for the consideration of H. J. Res. 636, the proposed Quality Stabilization Act. pp. 20655, 20787
4. ELECTRIFICATION. Began debate on the Senate amendment to H. R. 10708, to amend the Rural Electrification Act of 1936 so as to authorize REA to finance communication facilities for the transmission of sounds, signals, pictures,



writing, or signs as well as voice. p. 20728

Received from the Federal Power Commission a copy of a publication, "Typical Electric Bills, 1962." p. 20787

5. FOREIGN AID APPROPRIATION BILL, 1963. Conferees were appointed on this bill, H. R. 13175. Senate conferees have already been appointed. pp. 20654-5
6. SUPPLEMENTAL APPROPRIATION BILL, 1963. Passed with amendment this bill, H. R. 13290 (pp. 20656-81). Agreed to an amendment appropriating \$250,000 for ARS for plant and animal disease and pest control (pp. 20667-70). As reported this bill includes \$500,000 for the Bureau of Outdoor Recreation, and \$3,850,000 for the revolving fund for the Virgin Islands Corporation.
7. MINERALS. Both Houses received from the President the semiannual report of the Office of Minerals Exploration. pp. 20681, 20789
8. PUBLIC WORKS. Passed with amendment H. R. 13273, the public works authorization bill. pp. 20681-719
9. TRADE FAIRS. Conferees were appointed on S. 3389, to promote the foreign commerce of the U. S. through the use of mobile trade fairs. Senate conferees have already been appointed. p. 20686
10. ROADS. Received from GAO a report on a review of selected activities of the Federal-aid highway program in Idaho. p. 20787
11. LEGISLATIVE ORGANIZATION. Rep. Halpern urged agreement to a resolution creating a Joint Committee on the Organization of the Congress. p. 20786
12. LEGISLATIVE RECORD. Several Representatives inserted statements on the legislative accomplishments of the 2nd session of the 87th Congress. pp. 20774-81, 20781-3.
13. LEGISLATIVE PROGRAM. Rep. Albert announced the following legislative program for Thurs.: H. R. 3985, import duty on certain bread; H. R. 12109, duty-free entry of certain grasses; H. R. 5260, processing tax on coconut oil; H. R. 5700, contract carriers; conference report on H. R. 11970, proposed Trade Expansion Act of 1962; conference report on H. R. 12648, the agricultural appropriation bill; conference report on H. R. 7927, the pay bill; conference report on S. 1552, the drug bill; S. 1123, to extend certain child labor provisions of the Fair Labor Standards Act to children employed in agriculture; and the conference report on H. R. 11665, the school lunch fund apportionment bill. p. 20755

#### SENATE

14. PERSONNEL. Both Houses received and the Senate agreed to the conference report on H. R. 7927, the Federal pay and postal rate increase bill (H. Rept. 2525) (pp. 20732-55, 20787, 20855-7). See Digest 174 for items of interest  
The Foreign Relations Committee reported without amendment S. 3459, to authorize the appointment of one additional Assistant Secretary of State (S. Rept. 2272). p. 20790  
Received from the Joint Committee on Reduction of Nonessential Federal Expenditures the report on Federal employment and pay for August 1962. pp. 20790-3
15. FARM PROGRAM. Sen. Miller referred to Sen. Humphrey's recent criticism of



may have 5 legislative days in which to extend their remarks on the bill just passed.

The SPEAKER. Without objection, it is so ordered.

There was no objection.

#### GENERAL LEAVE TO EXTEND REMARKS

Mr. THOMAS. Mr. Speaker, I ask unanimous consent that all Members may have 3 legislative days in which to extend their remarks concerning our beloved Speaker at that point in the RECORD following the remarks of Mr. FOGARTY.

The SPEAKER. Without objection, it is so ordered.

There was no objection.

#### EIGHTH SEMI-ANNUAL REPORT OF THE OFFICE OF MINERALS EXPLORATION—MESSAGE FROM THE PRESIDENT OF THE UNITED STATES

The SPEAKER laid before the House the following message from the President of the United States, which was read, and together with the accompanying papers, referred to the Committee on Interior and Insular Affairs:

*To the Congress of the United States:*

I transmit herewith the Eighth Semi-annual Report of the Office of Minerals Exploration from the Secretary of the Interior as prescribed by section 5 of the act of August 21, 1958, entitled "To provide a program for the discovery of the mineral reserves of the United States, its Territories and possessions by encouraging exploration for minerals, and for other purposes."

JOHN F. KENNEDY.

The WHITE HOUSE, October 3, 1962.

#### RIVERS AND HARBORS AND FLOOD CONTROL PROJECTS

Mr. COLMER. Mr. Speaker, by direction of the Committee on Rules I call up the resolution (H. Res. 823) and ask for its immediate consideration.

The Clerk read the resolution, as follows:

*Resolved*, That upon the adoption of this resolution it shall be in order to move that the House resolve itself into the Committee of the Whole House on the State of the Union for the consideration of the bill (H.R. 13273) authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes. After general debate, which shall be confined to the bill, and shall continue not to exceed two hours, to be equally divided and controlled by the chairman and ranking minority member of the Committee on Public Works, the bill shall be read for amendment under the five-minute rule. At the conclusion of the consideration of the bill for amendment, the Committee shall rise and report the bill to the House with such amendments as may have been adopted, and the previous question shall be considered as ordered on the bill and amendments thereto to final passage without intervening motion except one motion to recommit.

The SPEAKER pro tempore (Mr. ALBERT). The gentleman from Mississippi is recognized for 1 hour.

Mr. COLMER. Mr. Speaker, I yield the usual 30 minutes to the gentlewoman from New York [Mrs. ST. GEORGE], and pending that I yield myself such time as I may consume.

The SPEAKER pro tempore. The gentleman is recognized.

Mr. COLMER. Mr. Speaker, House Resolution 823 provides for the consideration of H.R. 13273, a bill authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes. The resolution provides an open rule with 2 hours of general debate.

H.R. 13273 is similar to the omnibus river and harbor and flood control bills of 1960 and preceding years, which have been considered at intervals of 2 to 4 years.

The purposes of the bill are to authorize construction of certain projects for navigation, beach erosion control, flood control, and other purposes, on which favorable recommendations have been made by the Chief of Engineers; authorize an increase in the monetary authorization for one comprehensive river basin plan previously approved by the Congress; authorize surveys of problems on streams and at other localities, to be carried out by the Corps of Engineers; provide for reimbursement to local interests for work done on authorized beach erosion control projects, and other matters.

Title I of the bill covers river and harbor works, including navigation and beach erosion control projects and matters related thereto. Title II covers flood control works, hurricane protection works, multiple-purpose works including and related to flood control and hurricane protection, and matters related thereto.

The total cost of the bill is estimated to be \$2,307,719,300.

Mr. Speaker, I urge the adoption of House Resolution 823.

Mr. Speaker, I reserve the balance of my time.

Mrs. ST. GEORGE. Mr. Speaker, I yield myself such time as I may require.

Mr. Speaker, House Resolution 823 makes in order consideration of H.R. 13273 authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

Mr. Speaker, this bill, as it comes before us, contains 167 projects. The price tag on them is \$2,300 million. There is no one on the floor practically listening to the bill, because presumably the 297 Members who already have projects in the bill are very well satisfied with its contents.

I am not going to criticize the bill because I have not had enough time to study or examine it, nor has anyone else, I might add.

Yesterday morning your Committee on Rules met at 10:30 to consider this bill. When we arrived in committee we were informed that the bill had not yet been

brought up from the Printer, nor had the report. We recessed until 11:15 yesterday morning, when the bill was finally brought to our attention for consideration. It is very obvious it was considered in an extremely cursory manner, and for that reason it would be impossible to either criticize or endorse in an intelligent manner.

This bill differentiates from the Senate bill, in that it is just about half the amount; therefore we like to believe it is preferable to the Senate bill. I would like to point out, however, Mr. Speaker, that in the minority report attention is called to the fact that there are 4 projects out of the 167 that are not even budgeted. I believe amendments are to be offered on the floor to strike these four projects from the bill, and it is my hope, at least, and I think the hope of some others, that that will be done. Out of 167 projects to only strike out 4, for the very obvious reason they have not been budgeted and have not been approved by the Bureau of the Budget, should be sufficient reason to strike these projects from the bill.

Mr. HALLECK. Mr. Speaker, will the gentlewoman yield?

Mrs. ST. GEORGE. I yield to the gentleman from Indiana.

Mr. HALLECK. Mr. Speaker, I would like to say at the outset that, of course, this is a very important matter and should have the attention of all Members.

The gentlewoman has referred to certain items that are in the bill. I would like to say at this point that for better than 25 years the people of the State of Indiana, their elected officials, Governors, Democrats, and Republicans, down to now, when we have a Democratic Governor, have been striving for a public deep water port on Lake Michigan on Indiana shores.

We have had a favorable report from the Army engineers. We have been years and years achieving that. The Army engineers have reported to the Bureau of the Budget that the project is economically feasible. I have every reason to believe that all of the people in the executive branch of the Government recognize that this project is economically feasible.

But for some reason or other, I think probably I know what the reasons are, although probably I cannot talk about them here on the floor of the House, but for reasons that I do not think are well founded, the approval of the Bureau of the Budget, along with the transmission to the Congress of the favorable report of the Army engineers, after all of the procedures have been gone through has not been forthcoming.

Now, could I just say further, with the gentlewoman's indulgence, in all my time here I have sought to abide by the rules governing consideration of matters such as these. I do not know yet what we from the State of Indiana, without regard to political affiliation, ought to do today about getting our project advanced.

Mrs. ST. GEORGE. I would like to point out to the gentleman from Indiana that I have mentioned four projects.



Mr. HALLECK. I understand.

Mrs. ST. GEORGE. Not one of these projects is located in the State of Indiana. I would like to also ask the gentleman if his project is in the bill about which he is talking?

Mr. HALLECK. If the gentlewoman will yield further, it has been introduced in bills by Members of the Indiana delegation here in the House of Representatives. It is not included in this bill. It should be included in this bill.

Mrs. ST. GEORGE. That may well be, and I hope the gentleman will offer such an amendment.

Mr. HALLECK. If the gentlewoman will yield further, may I just say this: As distinguished from some projects that are presently in the bill, our harbor has been approved by the Army Engineers, declared economically feasible, and again may I say for reasons completely outside my control or apparently outside the control of anyone from my great State, Democrat or Republican, the approval of the Bureau of the Budget has not been forthcoming since last June. It should have been here. The project should have been included in this bill.

Now, as I said, I have always tried to follow the rules of procedure here. But if there ever was a project justified, this is it. When I first came to Congress, the Governor of my State was Paul V. McNutt. I appeared with him to testify in favor of this project. Already there is one steel mill located in this area. There will be others. What we need in Indiana is a public port, with the land available to provide for a diversified industrial complex, not just one kind of production, but all kinds of production.

We have too long been foreclosed. Possibly we are foreclosed now. But I want it clearly understood that it is through no fault of mine. In my 28 years here I do not think I have ever asked for a single thing for my own district which I could not demonstrate was completely justified. Seldom have I asked for a single thing for my district, but I must say that the failure of the Bureau of the Budget to follow the recommendations of the Army Engineers, after years and years of support, is in my opinion completely without understanding, except as I said, having regard for the parliamentary situation that sort of hems us in here once in a while, some things have intervened which I do not believe are justified.

Mrs. ST. GEORGE. Mr. Speaker, I want merely to assure my leader that, of course, I was not in any way referring to his project as one in the bill. The four projects that I mentioned I think are definitely open to criticism. Of course, the House in due time can work its will on this. On the other hand, I think the gentleman from Indiana has brought out something that I wanted to touch upon also. The great mistake of bringing up a bill like this in a few short days and expecting to have the House vote intelligently upon it is just impossible and cannot be done.

Mr. WRIGHT. Mr. Speaker, will the gentlewoman yield?

Mrs. ST. GEORGE. I yield.

Mr. WRIGHT. Mr. Speaker, I should like to comment with respect to the remarks made by our distinguished colleague from Indiana [Mr. HALLECK] that I certainly sympathize with his point of view and with the frustration which frequently grips a Member of this House when he has the difficult task of trying to get through the various administrative agencies clearance for these projects. It is my understanding that we intend in this committee to have another omnibus bill next year. I should like to pledge to the gentleman from Indiana, as one member of this committee, that this project having been in the mill as long as it has, whether or not it get favorable clearance from the Bureau of the Budget, I for one will be most anxious to help and support him in any way I can to see that it gets a fair and fully sympathetic hearing from this committee when we meet to hear these matters next year.

We cannot always be bound and inhibited by the recommendations of the Bureau of the Budget, although we try as best we can to do so. These two projects which have not been cleared by the Bureau of the Budget out of the 167 contained in this present bill may possibly be in the same category as the one referred to by the gentleman from Indiana.

Mr. HALLECK. Mr. Speaker, will the gentlewoman yield further to me?

Mrs. ST. GEORGE. I yield.

Mr. HALLECK. Mr. Speaker, I appreciate the remarks of the gentleman. All I can say is that we in my State, going clear back to the time when Mr. Minton was a Senator from Indiana and before he was a Justice of the Supreme Court; Senator Van Nuys; Governor McNutt, whom I mentioned earlier; Governor Schricker, who was twice Governor of Indiana; Governor Gates, Governor Craig, and every other Governor I can think of, and almost without exception our whole congressional delegation have been trying for all the years I have been here—28—to build this public port. We have been roadblocked and stymied to the point where some of us, after a bit, are going to start telling the truth. As I say, I do not know for sure what we can do about it today. I am going to watch and see what happens.

Mr. CRAMER. Mr. Speaker, will the gentlewoman yield to me?

Mrs. ST. GEORGE. I yield.

Mr. CRAMER. Mr. Speaker, in order that the situation be understood, and that we are not misled by some of the suggestions that there are "only four projects in controversy," I think it would be well at this point to say that the value of the projects that are in controversy is \$144 million. Therefore, not minimizing the fact that there is moneywise a very substantial disagreement with regard to the bill, it will be the objective of the minority when the proper time comes for amendment, to offer amendments to try to get a clean bill and to strike out the \$144 million worth of projects in this \$2.3 billion bill, which is a pretty substantial portion of the bill.

Mr. Speaker, may I say secondly to the gentleman from Indiana [Mr. HALLECK] with regard to his project, that I know of no controversy concerning it; I know of no reason why the Bureau of the Budget should not have acted on it, because we certainly were flooded—and I mean flooded—with approvals by the Bureau of the Budget here in the last 10 or 12 days, since consideration of this bill started. The flood gates have been opened for Bureau of the Budget approval of projects of all kinds, many of which have not been waiting nearly as long as that of the gentleman from Indiana.

I know of no reason, no legitimate reason, why that project should not have been brought before our committee unless, perhaps, the gentleman just was not on the right list.

Mrs. ST. GEORGE. Mr. Speaker, may I say to the gentleman that I am very happy for his contribution and for his bringing out the fact that these four projects total \$144 million, which, as he has well said, is a considerable amount. I would also like to point out that the Bureau of the Budget, I understand—and maybe at this very hour—are reversing their stand on some of these projects. Therefore, when I say that there are four projects that were disapproved, that was as of 11:15 yesterday morning. I do not vouch for the fact that they are still not acceding to these demands. In other words, Mr. Speaker, while we are not quarreling too much—and I say again not too much—with this bill, we must quarrel with the way in which it has been handled and brought before this House.

This should have been taken up months ago. It should have been worked on for a long time. There are some of the projects where the opponents of the project were never even heard in the various committees. That was testified to before the Rules Committee.

For all these reasons I trust that in the next Congress, the 88th Congress, we will start working a little before the end of June and try to study some of these matters that deserve a great deal of study and a great deal of consideration.

Mr. Speaker, I yield 5 minutes to the gentleman from Texas [Mr. ALGER].

(Mr. ALGER asked and was given permission to proceed out of order.)

Mr. ALGER. Mr. Speaker, the overriding importance of what I have to say here today, the equal protection of the law, and I measure every word, is the only reason I would intrude on this debate.

Mr. Speaker, at this moment in Springfield, Mo., a citizen of these United States is being held in prison by the Government and from all the facts I have been able to gather, I am deeply concerned that his constitutional rights are being tragically violated. Maj. Gen. Edwin Walker is a resident of the Fifth District of Texas and I am his voice in Congress. This morning I received a telephone call from General Walker's mother, appealing to me to protect her son from what appears to be a deliberate



conspiracy to deprive him of his liberty. As a responsible Member of the Congress of the United States I cannot, indeed it would be a violation of my oath, to refuse to heed such an appeal—an appeal from his mother.

As I stated on the floor of the House yesterday and as I made clear to the Attorney General in a telephone conversation with him yesterday morning, it is not my purpose to judge the guilt or innocence of General Walker concerning the charge made against him. It is my bounden duty as a Representative of the people to see that General Walker has the same protection of the law and the same guarantees of his constitutional rights as the Government is giving to James Meredith, using every source at its command to do so.

Since talking with the Attorney General yesterday morning and since my telephone conversation with the mother of General Walker, I have been given a complete chronology of the arrest, arraignment, imprisonment, and finally the ordering of a mental test for General Walker. This record makes it painfully clear that in the unparalleled treatment of General Walker the Government has violated two of his constitutional rights. No. 1, the right to be admitted to bail. No. 2, the right to have legal representation at every stage of the proceeding. He did not have legal representation in the court when the commitment order was issued by a judge in Mississippi while General Walker was being held in a cell in Springfield, Mo., having been sent there the day previous to the order which committed him there.

In order that every Member of this body have the benefit of the complete record, I would like to summarize the course of events as they have been given to me by General Walker's attorney within the past few hours.

General Walker was arrested around noon on Monday, October 1. His hearing was held at about 2 p.m. He was taken from Mississippi about 4 p.m. to be incarcerated at a Federal Prison reserved for psychiatric and mental prisoners where he arrived at 6:55 p.m.

As I pointed out in my remarks on the floor yesterday evening, the Attorney General assured me at about 10:30 yesterday morning, October 2, that General Walker was being treated as any other person accused of a law violation, that he was not removed to Springfield because it was a mental institution, that he could not be subjected to mental tests without a court order, and that he would be released on bond as soon as such bond was made available.

At 5:44 p.m. yesterday the news ticker carried a report that a Mississippi judge had issued a court order after a hearing held in Mississippi at 2 p.m. approximately that afternoon, ordering psychiatric tests for General Walker.

Mr. Speaker, we dare not allow our Government to ride roughshod over the constitutional rights of General Walker because if it is permitted to do so, then the freedom of every citizen of this land is in jeopardy and, indeed, the Constitution will have been betrayed.

General Walker's attorney advised me further that it was not possible to make the bond for him in Mississippi because he was shipped out before bond could be arranged and a man was there with the money. All day yesterday and up until this very moment, they have been endeavoring to make bond and have not been permitted to do so.

There are very sinister overtones to this whole proceeding and it is my opinion that Congress must take some action to clear up the implications. In the haste with which the administration incarcerated General Walker and seemingly denied him his constitutional rights, it has willfully and illegally denied him full protection of the law through manipulation of the law or it has acted in collusion with the courts. In either case General Walker has been denied equal protection under the law and this we dare not ignore.

I have purposely refrained from commenting on the situation in Mississippi which resulted in the arrest of General Walker because, as I stated yesterday, while I have never agreed with the 1954 decision of the Supreme Court, it is my contention that the decision must be changed in the Halls of Congress and not on the campus of the University of Mississippi. As an officer of the Federal Government, elected by the people of the Fifth District of Texas, General Walker's district, I feel that I am bound by my oath of office to protect the people in their constitutional rights and I know every other Member intends the same protection to all citizens, and to uphold the laws of the land and the legal procedures of our courts even when I am in disagreement. But now I must comment because as in the case of General Walker, it appears the Government is going far beyond its constitutional authority in imposing its will upon the State of Mississippi and its people. It has been reported by news media, I suppose this is accurate and it is the only information I have, that U.S. marshals are preventing students of the University of Mississippi from leaving classes attended by James Meredith when they desire so to do. It is one thing to guarantee James Meredith the right to attend classes. It is quite another, and wholly without any constitutional authority for Federal officers to force other students to attend classes which they may wish to leave for any reason whatsoever.

The press reports further that U.S. marshals—and I have this morning's newspaper column to back this up, and that is all I know about it, in case that column is inaccurate, and members of the Armed Forces are searching cars without warrants. In the absence of warrants or in the absence of a declaration of martial law, such action is completely in violation of fourth amendment of the Constitution, as I understand it and I am not an attorney, I am freely admitting this, which states:

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue, but upon probable cause, supported

by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

Mr. Speaker, I appeal to every Member of this body and to every responsible official of this Government, let us use every means to return the situation we now face to one of reason governed by law and the Constitution. To do less, to continue to violate the rights under law of General Walker and to promulgate the questionable acts of unconstitutionality now going on in Mississippi shakes the very foundations of this Republic and it could come crashing down in the midst of such fury that the freedom of mankind will be destroyed forevermore.

I now ask that every means at the disposal of Congress be brought to bear to stop any further illegal acts against General Walker so that he may be brought speedily to trial with proper legal representation and under the full protection of all our legal procedures, not the least of which is his being able to prepare his own case for presentation, which is now being denied him, according to his attorneys.

Mr. ROONEY. Mr. Speaker, will the gentleman yield?

Mr. ALGER. I yield to the gentleman.

Mr. ROONEY. I should like to ask the distinguished gentleman if he has any information as to what General Walker was doing on the campus of the University of Mississippi at Oxford, Miss., last Sunday night?

Mr. ALGER. I do not have, except newspaper accounts, and neither has General Walker been able to answer that in his own defense before being committed.

The SPEAKER pro tempore. The time of the gentleman has expired.

Mr. ALGER. Mr. Speaker, as addenda to my remarks, I would like to include four exhibits. First, section 18 U.S. 4244:

Section 18 U.S. 4244: When the U.S. attorney reasonably believes that a person is insane or is so mentally defective that he is unable to understand the nature of the charge against him or to assist in his defense he will be under motion of U.S. attorney and under order of court committed for psychiatric examination.

Second. A transcript of the telephone conversation today at 11 a.m. with General Walker's attorney, Clyde J. Watts:

Mr. ALGER. All right, he was arrested around noon, hearing around 2, left around 4, and got to Springfield around 6; is that right?

Mr. WATTS. He got to Springfield at 6:55.

Mr. ALGER. Right.

Mr. WATTS. His commitment before the judge in Mississippi was the following day, at which time Judge Clayton did not have Walker before him, so he could observe his condition and demeanor.

Mr. ALGER. Just a minute. Of course his hearing was after they had already shipped him out?

Mr. WATTS. That's right. Judge Clayton entered his order yesterday after Walker had arrived in Missouri.

Mr. ALGER. Right.

Mr. WATTS. It would have fixed the time of Clayton's order somewhere shortly after noon, probably around 2 o'clock on Tuesday.



Mr. ALGER. October 2?

Mr. WATTS. October 2.

Mr. ALGER. All right.

Mr. WATTS. Now, those are the critical times and dates.

Mr. ALGER. Bond was refused at the day of October 1 and October 2.

Mr. WATTS. The bond was—no, now here, the bond was fixed on October 1.

Mr. ALGER. Right. And I understood that that day—

Mr. WATTS. Before his bondsman, who was in Mississippi, before he could make the bond, Walker was brought to Missouri.

Mr. ALGER. Missouri on the second, and on the second his bond was refused?

Mr. WATTS. All morning long we were here endeavoring to make the bond.

Mr. ALGER. I see. But you couldn't make the bond?

Mr. WATTS. We could not—in other words, there is no legal proceeding in Missouri through which we could make the bond.

Mr. ALGER. I understand.

Mr. WATTS. We finally, after conference with the judge, were advised that the U.S. attorney would be here at 2 o'clock—

Mr. ALGER. Right.

Mr. WATTS. To discuss with us the mechanics of making the bond.

Mr. ALGER. Mechanics.

Mr. WATTS. When the U.S. attorney arrived, he called the U.S. attorney in Mississippi, who advised him that Judge Clayton, about 2 o'clock, had entered this new order and therefore bond was impossible.

Mr. ALGER. All right.

All right. My next question: He was sent to Springfield on the evening or the afternoon of October 1 without any court order?

Mr. WATTS. That's right. He was sent to Springfield by this telegram from the Director of Prisons that I read to you.

Mr. ALGER. James Bennett?

Mr. WATTS. James Bennett.

Mr. ALGER. Yes.

Mr. WATTS. To the marshal in Mississippi.

Mr. ALGER. The marshal who had General Walker in custody?

Mr. WATTS. Yes. That telegram directed delivery of Walker to Springfield, Mo.

Mr. ALGER. And the man sending the wire was James Bennett?

Mr. WATTS. That's right.

Mr. ALGER. But how did Craig figure in that?

Mr. WATTS. Craig is the U.S. Commissioner. He is the magistrate in Mississippi who fixed the bond.

Mr. ALGER. I see. I see. Okay.

Now, all right, I said that you agreed he was sent, though, to the mental prison without a court order; the court order came the next day?

Mr. WATTS. Now, the next day, this marshal in Mississippi sent this telegram that I quoted to you, dated October 2, which quotes the telegram from Bennett to the marshal.

Mr. ALGER. Right.

Mr. WATTS. Now, the following day, this telegram was sent to the warden, the Warden Russell here at the medical center. Now, that's the entire chronology.

Mr. ALGER. All right. Now, since he has arrived there, what has been the personal treatment? You made the point as his attorney that being incarcerated in a cell in a mental institution prevents him from making his case.

Mr. WATTS. That's right.

Mr. ALGER. I mean preparing his case.

Mr. WATTS. In other words, that defeats the very purpose of the statute. The statute is ostensibly for the protection of the accused prisoner.

Mr. ALGER. Yes.

Mr. WATTS. In order to attest his mental capacity to participate in his defense.

Mr. ALGER. And what is that statute?

Mr. WATTS. That's 18 United States Code Annotated 42.44.

Mr. ALGER. All right. I can look that up. OK.

Mr. WATTS. The purpose of that statute is to aid the accused who may be of questionable mentality to provide his defense.

Mr. ALGER. Right.

Mr. WATTS. Now, by the implementation of this statute, his defense is being completely frustrated in court.

Mr. ALGER. Now, do you have anything else to add?

Mr. WATTS. One other thing. The statute itself does not require that he be committed to a Federal penitentiary.

Mr. ALGER. Right.

Mr. WATTS. He could and properly should have been examined right there in Mississippi by a competent psychiatrist. Now, this business of shuffling him off to a penitentiary completely frustrates the preparation of his defense.

Mr. ALGER. I have got to run to the floor, but I want you to continue adding such material as you would like to. I have to leave, but my assistant, Ralph Marlatt, is here and I have a reporter putting it down.

Mr. MARLATT. Go right ahead.

Mr. WATTS. Now, we recognize in this unparalleled treatment of General Walker, the violation of two constitutional rights.

No. 1, the right to be admitted to bail.

No. 2, the right to have legal representation at every stage of the proceeding, which he did not have before Judge Clayton when the commitment order was issued yesterday at 2 o'clock.

Now, those constitutional rights are being, in our opinion, flagrantly denied him. And that covers it.

Mr. MARLATT. That's it. Fine. I think that's it, then.

Mr. WATTS. There is another concept you ought to get out.

Mr. MARLATT. All right.

Mr. WATTS. The Federal Government has massed and mobilized forces to protect the civil rights of one man in Mississippi, and in the operation of the juggernaut, it has run roughshod over the constitutional rights of General Walker.

Mr. Speaker, the morning newspaper account as it appeared in the Washington Post, Wednesday, October 3, 1962:

#### MENTAL TEST IS ORDERED FOR WALKER

SPRINGFIELD, Mo., October 2.—Former Maj. Gen. Edwin A. Walker, a key figure in weekend battling over admission of a Negro to the University of Mississippi, was ordered placed under psychiatric examination in a Federal prison today.

His attorneys announced immediately that they would fight the order in U.S. district court here Wednesday. They instructed Walker to refuse to cooperate with prison physicians.

Walker was locked in the U.S. medical center here. He was brought here from Oxford, Miss., in a border patrol plane October 1, after his arrest and arraignment on charges of inciting insurrection and seditious conspiracy.

U.S. District Attorney F. Russell Millin, of Kansas City, told newsmen the psychiatric examination order was issued in Oxford this afternoon by U.S. District Judge Claude Clayton. Millin said it prevents Walker from obtaining his release under a \$100,000 bond set yesterday at his arraignment.

#### TO TAKE 60 TO 90 DAYS

Millin said he understood the psychiatric examination would take 60 to 90 days and that during that period Walker would not be bailable.

Clyde J. Watts, spokesman for Walker's corps of attorneys, said they would ask U.S. District Judge John W. Oliver, holding court here, for either a writ of habeas corpus, freeing Walker, or for an injunction against any surgical or medicinal treatment of the for-

mer general without the presence of a psychiatrist or physician approved by Walker's counsel.

Watts said he and two Springfield attorneys, George Donegan and William Wear, talked to Walker in the medical center this morning and found him "clear, lucid, undisturbed, and possessing all his mental faculties."

Watts said they told Walker "that his response to questions asked by physicians or psychiatrists at the medical center should be only his name, rank, and serial number—the same as an American soldier who has been captured."

Watts, reading from a 4-page statement, told newsmen he had talked to Judge Clayton at Oxford by telephone and was informed the order committing Walker for psychiatric examination was issued on the basis of testimony by Dr. Charles E. Smith, a bureau of prisons psychiatrist. Watts quoted Judge Clayton as saying Dr. Smith had not seen Walker.

Watts said that during their talk with Walker this morning, Walker gave them his version of what happened at Oxford.

"He at no time led any assault, charge, or overt act against any State or Federal officer, including U.S. marshals," Watts said. "He at no time incited anyone to riot or disorder."

Walker told his lawyers, Watts said, that he was in contact with the sheriff in Oxford Saturday and Sunday and advised him he was "there to observe developments."

Walker said he was eating dinner Sunday night during President Kennedy's television speech to the Nation when newsmen advised him of a demonstration at the Ole Miss campus. He said he went there and found a "scene of considerable disturbance." He said he was standing near a Confederate monument about 300 yards from the administration building when several persons asked him to make a statement.

"General Walker made a statement that participants should avoid all semblance of violence that the real war was in Cuba, not Mississippi," Watts said.

#### SAYS HE HAD NO MISSILE

The former general told the lawyers his remarks lasted about 5 minutes and that as he watched the students going toward the U.S. marshals and then moving back, he was no closer than 30 feet to the officers.

Watts said Walker had "no missile, weapons, or rocks" and that "he counseled the participants to avoid violence."

The lawyer said the statement he read to newsmen had been concurred in by another Walker attorney, Robert Morris of Dallas, former counsel for the House Un-American Activities Committee. Morris was in Cleveland today, but was expected to arrive in Springfield soon.

Watts said Morris issued the following statement:

"I ask all citizens to examine what has happened today. Because General Walker raised his voice in a cause not popular to all of us, he should not be subject to this treatment. This is a suspension of the Bill of Rights."

The \$100,000 bail set for Walker was offered on the basis of Oklahoma sureties that were not otherwise identified. Mrs. George Walker of Center Point, Tex., wife of the former general's rancher brother, told newsmen in Houston that it had been raised from two sources—the family and others whom she did not identify.

Mr. Speaker, finally, a record account from the Washington Post regarding the illegal search of automobiles in Oxford:

#### TORN BETWEEN PRIDE AND SHAME, OXFORD SETTLES INTO AN UNEASY CALM

(By Gene Sherman)

OXFORD, Miss., October 2.—An uneasy calm settled today over this proud college town



that seems torn between civic pride and shame.

Shops were open again, but military convoys continued to rumble through the town, directed by military police stationed at intersections to halt civilian traffic when necessary.

MP's constantly patrolled the streets and the campus in jeeps. Army helicopters spun low overhead and Air Force troop transports kept the tiny airport busier than it has ever been.

Every car entering Oxford was searched for weapons by MP's who set up blockades on all roads leading into town.

There was some question by what legal authority this was accomplished, but as one resentful Oxford resident commented: "Who's going to fight 'em?"

"If I had to research the authority for that," said U.S. Attorney H. M. Ray, "I wouldn't have time to get my work done." He said it as an afterthought to a curt "No comment."

Theoretically, local government and law enforcement still prevail, but the demarcation between them and military authority is thin at the moment.

Martial law has not been declared, but Lt. Gen. Hamilton H. Howze, in command of the troop buildup, admitted it was pretty close at one time. He hastened to add that the situation had been close, not the declaration.

Chief of Police James D. Jones said he was glad to see the troops move in because he didn't think he had enough men to handle the situation. There are six in his department.

Local police are continuing to enforce city ordinances, he said, but the quelling of what might develop into a disturbance in the streets was up to the military. \* \* \*

Mr. COLMER. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, it is not my intention to get into any debate at this time on this unfortunate tragedy that is being enacted in my once sovereign State of Mississippi, but since the question has been raised here may I say to my distinguished friend from Texas and to the other Members of this body, and through this media to the country, that my understanding of the situation that has developed in Mississippi goes far beyond General Walker.

If what I understand to be the true facts down there as I have gotten them from reliable people, the whole question of the constitutional rights not only of General Walker but of the people of—again I repeat—the once sovereign State of Mississippi are being challenged and are being run over rough-shod.

In this connection, Mr. Speaker, many sound lawyers challenge the procedure if not the legality itself under which the U.S. Supreme Court through the Justice Department acted to force this would be student Meredith into the University of Mississippi.

As Mr. Arthur Krock so well pointed out in the New York Times on October 1, Mississippi was denied due process. He said in part:

Established procedure under due process is completed only when a court of last resort has formally disposed of the final step available to litigants. Since the agreement of all the other Justices that Black announced in his order of September 12, 1962, could have been learned only by communication means other than face-to-face discussion, this raises the legitimate question whether 'due-process'

was afforded the State of Mississippi. If, as Justice Black also announced, the Court was certain to reject the State's request for review, that could have been done in the established manner when the Court reassembled today, the day Meredith actually was enrolled at the university.

In other words, in the haste of the administration to force the admission of the NAACP's candidate Meredith into the all-white university, the State of Mississippi was denied the opportunity under due process to have the merits of its side considered by the Supreme Court in an orderly manner. Instead a single Justice, Hugo Black, after some kind of a Gallup poll, acted on his own. The appeal of the State of Mississippi for an orderly review of the case is thus left hanging in the balance and has never been acted upon.

Mr. Speaker, I had not intended to go into this at this time. At another point in the RECORD I will have some further remarks on this unfortunate event.

Mr. Speaker, this is happening today to the people of Mississippi under the pretext of the admission of one man with his alleged rights, while the rights of 5,000 other students are apparently not considered. Yet it is happening to them under that pretext today. How do we know it is not going to happen to you tomorrow under some other pretext?

Mr. Speaker, I am so concerned about this matter, I am so disturbed about it, that I even hesitate to speak on the subject. But let me say to my friend from Texas that in the other body the machinery has been set in motion for an investigation of the legality of this whole procedure that has brought on this holocaust down in my beloved State of Mississippi.

(Mr. COLMER asked and was given permission to revise and extend his remarks.)

Mr. ALGER. Mr. Speaker, will the gentleman yield for a unanimous-consent request?

Mr. COLMER. Mr. Speaker, I yield for a unanimous-consent request only.

Mr. ALGER. Mr. Speaker, I ask unanimous consent that I may be permitted to revise and extend my remarks and to include extraneous material that will include some of the conversation to which I alluded in my remarks.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Texas?

There was no objection.

Mr. COLMER. Mr. Speaker, I move the previous question on the resolution. The previous question was ordered.

The SPEAKER pro tempore (Mr. ALBERT). The question is on the resolution.

The question was taken.

Mr. FULTON. Mr. Speaker, I object to the vote on the ground that a quorum is not present, and I make the point of order that a quorum is not present.

The SPEAKER pro tempore. Evidently a quorum is not present.

The Doorkeeper will close the doors, the Sergeant at Arms will notify absent Members, and the Clerk will call the roll.

The question was taken; and there were—yeas 344, nays 4, not voting 87, as follows:

[Roll No. 267]

YEAS—344

Abbitt	Edmondson	Lipscomb
Abernethy	Elliott	Loser
Addabbo	Ellsworth	McCulloch
Albert	Everett	McFall
Alford	Fallon	McMillan
Alger	Farbstein	McVey
Andersen,	Fascell	Macdonald
Minn.	Feighan	Mack
Andrews	Fenton	Madden
Arends	Findley	Mahon
Ashbrook	Finnegan	Mailliard
Ashley	Fino	Marshall
Ashmore	Fisher	Martin, Nebr.
Auchincloss	Flood	Mason
Avery	Flynt	Mathias
Ayres	Fogarty	Matthews
Bailey	Ford	May
Baker	Forrester	Meador
Baldwin	Fountain	Morrow
Baring	Frelinghuysen	Miller, Clem
Barrett	Friedel	Miller, N.Y.
Barry	Fulton	Milliken
Bass, N.H.	Gallagher	Mills
Bass, Tenn.	Garland	Minshall
Bates	Garmatz	Moeller
Battin	Gary	Monagan
Becker	Gathings	Montoya
Beckworth	Gavin	Moore
Beermann	Glaimo	Moorhead, Pa.
Bell	Gilbert	Morgan
Bennett, Fla.	Gonzalez	Morris
Betts	Goodling	Morrison
Blatnik	Granahan	Morse
Boland	Grant	Mosher
Bolton	Gray	Moss
Bonner	Green, Oreg.	Multer
Bow	Griffin	Murphy
Brademas	Gross	Murray
Bray	Hagan, Ga.	Natcher
Brewster	Hagen, Calif.	Nedzi
Bromwell	Haley	Nelsen
Brooks, Tex.	Halleck	Nix
Broyhill	Halpern	Norblad
Bruce	Harding	Norrell
Buckley	Hardy	Nygaard
Burke, Mass.	Harrison, Wyo.	O'Brien, N.Y.
Burleson	Harsha	O'Hara, Ill.
Byrne, Pa.	Harvey, Mich.	O'Konski
Byrnes, Wis.	Healey	Olsen
Cahill	Hechler	O'Neill
Carey	Hemphill	Osmers
Casey	Henderson	Ostertag
Cederberg	Hoeven	Passman
Celler	Hollfield	Patman
Chamberlain	Holland	Pelly
Chelf	Horan	Perkins
Chenoweth	Hosmer	Peterson
Church	Huddleston	Pfost
Clancy	Ichord, Mo.	Philbin
Clark	Inouye	Pike
Coad	Jarman	Pilcher
Cohelan	Jennings	Pirnie
Collier	Jensen	Poage
Colmer	Joelson	Poff
Conte	Johnson, Calif.	Powell
Cook	Johnson, Md.	Price
Cooley	Johnson, Wis.	Purcell
Corbett	Jonas	Randall
Corman	Jones, Ala.	Ray
Cramer	Judd	Reece
Cunningham	Karsten	Reuss
Curtin	Karth	Rhodes, Ariz.
Curtis, Mass.	Kastenmeier	Rhodes, Pa.
Curtis, Mo.	Kearns	Riehlman
Daddario	Keith	Riley
Dague	Kelly	Rivers, Alaska
Daniels	Kilgore	Rivers, S.C.
Davis,	King, Calif.	Roberts, Ala.
James C.	King, N.Y.	Roberts, Tex.
Davis, Tenn.	King, Utah	Robison
Dawson	Kirwan	Rodino
Delaney	Kitchin	Rogers, Colo.
Dent	Kluczynski	Rogers, Fla.
Denton	Knox	Rooney
Derounian	Kornegay	Rosenthal
Derwinski	Kowalski	Rostenkowski
Devine	Kunkel	Roudebush
Dingell	Kyl	Roush
Dole	Landrum	Rutherford
Donohue	Lane	Ryan, Mich.
Dorn	Langen	Ryan, N.Y.
Dowdy	Lankford	St. George
Downing	Latta	St. Germain
Doyle	Lennon	Santangelo
Dulski	Lesinski	Schadeberg
Durno	Libonati	Schenck
Dwyer	Lindsay	Schneebell



Schweiker	Sullivan	Wallhauser
Schwengel	Taber	Walter
Scott	Taylor	Weaver
Selden	Teague, Calif.	Westland
Shelley	Teague, Tex.	Wharton
Shriver	Thomas	Whittener
Sibal	Thompson, La.	Whitten
Sikes	Thompson, N.J.	Wickersham
Sisk	Thompson, Tex.	Widnall
Slack	Thomson, Wis.	Wilson, Calif.
Smith, Iowa	Thornberry	Wilson, Ind.
Smith, Miss.	Toll	Winstead
Smith, Va.	Tollefson	Wright
Spence	Trimble	Yates
Stafford	Tuck	Young
Staggers	Tupper	Younger
Stephens	Udall, Morris K.	Zablocki
Stratton	Vanik	
Stubblefield	Waggonner	

## NAYS—4

Hoffman, Ill.	Pillion	Smith, Calif.
Johansen		

## NOT VOTING—87

Adair	Hansen	Pucinski
Alexander	Harris	Quie
Anderson, Ill.	Harrison, Va.	Rains
Anfuso	Harvey, Ind.	Reifel
Aspinall	Hays	Rogers, Tex.
Belcher	Hébert	Roosevelt
Bennett, Mich.	Herlong	Rousselot
Berry	Hiestand	Saund
Blitch	Hoffman, Mich.	Saylor
Boggs	Hull	Scherer
Bolling	Jones, Mo.	Scranton
Boykin	Kee	Seely-Brown
Breeding	Keogh	Sheppard
Broomfield	Kilburn	Shipley
Brown	Laird	Short
Burke, Ky.	McDonough	Siler
Cannon	McDowell	Springer
Chiperfield	McIntire	Steed
Davis, John W.	McSween	Ullman
Diggs	MacGregor	Utt
Dominick	Magnuson	Van Pelt
Dooley	Martin, Mass.	Van Zandt
Evins	Michel	Vinson
Frazier	Miller	Watts
Glenn	George P.	Weis
Goodell	Moorehead,	Whalley
Green, Pa.	Ohio	Williams
Griffiths	Moulder	Willis
Gubser	O'Brien, Ill.	Zelenko
Hall	O'Hara, Mich.	

So the resolution was agreed to.  
The Clerk announced the following pairs:

Mr. Hébert with Mrs. Weis.  
Mr. Keogh with Mr. Adair.  
Mr. Green of Pennsylvania with Mr. Van Pelt.  
Mr. Zelenko with Mr. Michel.  
Mr. Rogers of Texas with Mr. Brown.  
Mr. Hull with Mr. McIntire.  
Mr. Rains with Mr. Utt.  
Mr. Roosevelt with Mr. Bennett of Michigan.  
Mr. Sheppard with Mr. Moorehead of Ohio.  
Mr. O'Brien of Illinois with Mr. Laird.  
Mr. Shipley with Mr. Berry of South Dakota.  
Mr. Herlong with Mr. Anderson of Illinois.  
Mr. Aspinall with Mr. Dominick.  
Mr. Alexander with Mr. Springer.  
Mr. John W. Davis with Mr. Quie.  
Mr. Anfuso with Mr. Siler.  
Mr. George P. Miller with Mr. Chiperfield.  
Mr. Ullman with Mr. MacGregor.  
Mr. McDowell with Mr. Short.  
Mrs. Griffiths with Mr. Kilburn.  
Mr. Harris with Mr. Van Zandt.  
Mr. Pucinski with Mr. Saylor.  
Mr. Magnuson with Mr. McDonough.  
Mr. Watts with Mr. Rousselot.  
Mr. Williams with Mr. Hiestand.  
Mr. Breeding with Mr. Scherer.  
Mr. Willis with Mr. Belcher.  
Mr. Burke of Kentucky with Mr. Harvey of Indiana.  
Mr. Boggs with Mr. Glenn.  
Mr. Diggs with Mr. Reifel.  
Mr. Evins with Mr. Goodell.  
Mrs. Hansen with Mr. Hall.  
Mr. Hays with Mr. Martin of Massachusetts.

Mr. O'Hara of Michigan with Mr. Broomfield.

Mrs. Kee with Mr. Scranton.

Mr. Steed with Mr. Gubser.

Mr. Harrison of Virginia with Mr. Dooley.

Mr. McSween with Mr. Seely-Brown.

Mr. Vinson with Mr. Hoffman of Michigan.

The result of the vote was announced as above recorded.

The doors were opened.

A motion to reconsider was laid on the table.

## MOBILE TRADE FAIRS

Mr. BONNER. Mr. Speaker, I ask unanimous consent to take from the Speaker's table the bill (S. 3389) to promote the foreign commerce of the United States through the use of mobile trade fairs, with a House amendment thereto, insist on the House amendment, and agree to the conference asked by the Senate.

The SPEAKER. Is there objection to the request of the gentleman from North Carolina? The Chair hears none, and appoints the following conferees: Messrs. BONNER, DOWNING, CASEY, MAILLIARD, and PELLY.

## RIVER AND HARBOR AND FLOOD CONTROL PROJECTS

Mr. DAVIS of Tennessee. Mr. Speaker, I move that the House resolve itself into the Committee of the Whole House on the State of the Union for the consideration of the bill (H.R. 13273) authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

The motion was agreed to.

Accordingly, the House resolved itself into the Committee of the Whole House on the State of the Union for the consideration of the bill H.R. 13273 with Mr. WALTER in the chair.

The Clerk read the title of the bill.

By unanimous consent the first reading of the bill was dispensed with.

The CHAIRMAN. Under the rule, the gentleman from Tennessee [Mr. DAVIS] will be recognized for 1 hour, and the gentleman from New Jersey [Mr. AUCHINCLOSS] will be recognized for 1 hour.

The Chair recognizes the gentleman from Tennessee.

Mr. DAVIS of Tennessee. Mr. Chairman, I yield myself 10 minutes.

Mr. Chairman, if I may have the attention of the committee for a moment, I should like to say that the members of this Committee on Public Works on both sides of the aisle have agreed in all sincerity to do everything possible to reduce the time consumed in the consideration of this bill, despite the fact that it is a big one.

I recognize that there are 297 Members of this House affected directly or indirectly, and certainly interested in the consideration of this bill. We recognize that there are 167 projects included in it. We know also that it carries a money value of \$2,300 million, covering 167 projects.

There is a bill in the other body which I understand will be considered on to-

morrow. It carries a much greater money value. I want to be absolutely frank with the House. We want to get a good bill out, but we recognize that we will go into conference when we pass our version, with very skillful legislators, and it will require patience, and I hope intelligent action on our part.

So, then, recognizing further that so many of our Members want to get home, having some duties to perform at home, some living a great distance from here, they should be entitled to go.

Se we want to cooperate with the House, and we ask the House cooperate with us, and we will get this bill out of the way as soon as possible and seek the conference and undertake to resolve the difference and try to bring back a sound bill which will be agreed to in conference. We do ask you to cooperate with us as we are asking to cooperate with you. We are going to discourage as much as possible too much conversation and too much discussion on the bill which may prove collateral. We want to keep this bill very much at it is, without the addition of any other projects. But I will say, in all fairness, we are going to have a bill in the House come next session, because there are a great many projects that should be in this bill and we promise, early in the session next year that this committee will give serious and full hearings to a great many projects that you may have in mind at the moment.

Mr. WESTLAND. Mr. Chairman, will the gentleman yield?

Mr. DAVIS of Tennessee. I yield to the gentleman from Washington.

Mr. WESTLAND. I am interested in this China Gardens project.

Mr. DAVIS of Tennessee. That is in the bill.

Mr. WESTLAND. I know it is in the bill, I may say to the gentleman, but we are very much interested on the Columbia and on the Snake Rivers in the fish going upstream. I understand there were no public hearings on China Gardens. It was authorized something like 7 years ago. It is supposed to be a regulating reservoir for Nez Perce and High Mountain Sheep, one of which is going to be constructed. It seems to me that you put the cart before the horse here when you authorize or build High Mountain Sheep, then perhaps the China Gardens would be in order.

Mr. DAVIS of Tennessee. May I interrupt the gentleman. If he will consult the gentleman on his side handling that particular project, they will advise the gentleman what they have in mind at the moment.

Mr. WESTLAND. I thought the chairman of the committee would be able to give me some information.

Mr. DAVIS of Tennessee. I am giving it to the gentleman.

Mr. WESTLAND. Why were not hearings held?

Mr. DAVIS of Tennessee. I am not going to yield further. I will get to that at the proper time.

Mr. JONES of Alabama. Mr. Chairman, will the gentleman yield?



Mr. DAVIS of Tennessee. I yield to the distinguished gentleman from Alabama.

Mr. JONES of Alabama. I want to say in response to the inquiries propounded by the distinguished gentleman from Washington [Mr. WESTLAND] that there was no opposition to the development of this project by any of the local agencies insofar as the report is concerned.

Mr. BALDWIN. Mr. Chairman, will the gentleman yield?

Mr. DAVIS of Tennessee. I shall be glad to yield to the distinguished gentleman from California.

Mr. BALDWIN. I think, since this has been brought up, it should be said further that a question was asked of the Corps of Engineers at that time if there was any opposition to the project and the Corps of Engineers at that time said "no." But subsequent investigation found that there is substantial opposition to it. In fact, there is even an application for private power now, which has not yet been resolved.

Therefore, the information before the committee at the time this project was voted upon was not at all complete.

Mr. CRAMER. Mr. Chairman, will the gentleman yield for one further observation?

Mr. DAVIS of Tennessee. I do.

Mr. CRAMER. For the information of the gentleman from Washington [Mr. WESTLAND] and others, this is one of the projects referred to which is in controversy insofar as the minority is concerned. There will be a motion made at the proper time to strike it out.

Mr. DAVIS of Tennessee. Mr. Chairman, I thought I was trying to conserve and save time. It looks as if I am responsible for losing some time, with my distinguished friend—and he is a good friend—the gentleman from Washington [Mr. WESTLAND] in regard to this project.

Mr. Chairman, I do not want to leave this, however, without saying we are going to have hearings on projects that should be closer to inclusion in this bill than they presently are. I want to say to the distinguished minority leader, the gentleman from Indiana [Mr. HALLECK] that I did not wait until next year to tell the gentleman my feelings about the gentleman's project. But on this floor just a few days ago I expressed the hope to the gentleman that the Bureau of the Budget would have that project forwarded so that the committee could include it. I promised the distinguished minority leader insofar as I was concerned, if it came in at the very last minute, it would be added to this bill.

Mr. HALLECK. Mr. Chairman, will the gentleman yield?

Mr. DAVIS of Tennessee. I yield to the distinguished minority leader.

Mr. HALLECK. I thank the gentleman for his courtesy and for his statement that I did discuss the matter with him. The gentleman and I have been friends for a long time. He will recall that I went to him and talked to him. However, long recognizing the arrangements by which we ought to proceed here, some suggestion has been made that perhaps since I once was majority

leader or that once a man of my party was President of the United States and had something to say about the Bureau of the Budget, why did I not get this project approved before? Well, the plain fact of the matter is we have pursued—we people from Indiana—a regular course to get final approval of the Corps of Engineers.

It was just within the last year or so that we obtained such approval.

I recognize the situation. I just want to say to the gentleman the one thing about it that kind of sticks in my craw, as we say out in Indiana, is that I absolutely know that the responsible people of my State, including our members of the port commission who have acquired hundreds of acres of lands for the development of an industrial complex that we need, had every reasonable assurance that the Bureau of the Budget would follow the recommendations of the Corps of Engineers, and transmit a favorable report on this project. That favorable report has not been forthcoming for reasons that I say should have no place in our legislative branch. But I recognize the difficulty of my situation.

Mr. DAVIS of Tennessee. Mr. Chairman, I will say further to the distinguished gentleman from Indiana that he stated to me, and we agreed that we were going to follow the rules of the House on this bill—he said to me very frankly that "If the Bureau of the Budget does not approve, I certainly will not ask you to consider it."

The gentleman will recognize that we were in entire agreement.

Mr. MADDEN. Mr. Chairman, will the gentleman yield?

Mr. DAVIS of Tennessee. I yield to the gentleman.

Mr. MADDEN. Mr. Chairman, in regard to my good friend, the minority leader, I might say this committee should be commended for not including the so-called Burns Ditch Harbor, that project did not start 20 years ago, it started 130-odd years ago, when Senator Daniel Webster came out to Michigan City, Ind., to dedicate a port at but a few miles up the shore from Michigan City, Ind. They discovered then that a port at that location, at the south end of the 600-mile sweep down from the north on Lake Michigan, annually fills up with sand and silt. Back in those days lake storms would block the harbor and require an appropriation every 3 or 4 years on the part of the Government to clean that harbor location so the harbor could function.

There is approved an application for an engineers study for a port to the west in Lake County, Ind., just out of that 600-mile sweep of sand drift, located at the Burns Ditch area, Lake County would make a practical location for a real port for northern Indiana.

There is an appropriation now authorized for an engineers' study at that location.

In verification of my good friend's statement regarding an engineers report, there have been two engineers reports on this so-called Burns Ditch—one report made in 1960 was withdrawn. That report criticized the location. That re-

calling of the first engineer's report was at the instance of the ex-Secretary of the Treasury, George Humphrey, who is building a steel mill at that location. He is making every effort to get the taxpayers of Indiana and of the United States to build a port for his steel mill. Mr. Humphrey has been very successful in his short experience as a Federal official on a number of different projects and contracts. I do not think that the people of the Nation should contribute to building a port for George Humphrey's steel mill, which is now under construction at this particular location. I feel sorry for this big land development project that some of the important people of Indiana are promoting in this area, but I do not think that the taxpayers of these United States should help build a port for George Humphrey's National Steel Corp.

Mr. HALLECK. Mr. Chairman, will the gentleman yield to me?

Mr. DAVIS of Tennessee. I yield to the distinguished gentleman from Indiana.

Mr. HALLECK. Mr. Chairman, the political overtones in this controversy have raged for years. The gentleman from the First District, for whom I have the highest regard, is like the mother who saw the column of soldiers going by and said, "Everybody is out of step but Jim." He is the one man from Indiana that I have been able to discover who is out of step.

By what he has just said he indicts our present Democrat Governor, Matt Welsh; he indicts the Port Commission; he indicts Governor McNutt; he indicts former Governor Schricker.

I will not stand for it. It is true that a steel company, Mid-West Steel, has built, on land that they have owned for years, a steel mill. They are going to build more. It is true that another steel company is going to build a mill.

The problem for the people of Indiana, my friend from Lake County notwithstanding, is to build there a deepwater port with land available for diversification. The gentleman from Lake County ought to understand and to know, because he represents a steel mill complex, that we need diversification. We need an opportunity for the development of a public harbor on the Great Lakes. May I say to the gentleman that if the State of Indiana, which already has put hundreds of thousands of dollars in this operation, is now to be foreclosed, one of two things will happen.

Maybe it will suit the gentleman who represents Lake County but it does not suit me and it does not suit all the other people I represent. Either the State of Indiana will build that harbor or the steel companies will build their harbors, as the steel companies built them at Gary. They are private harbors. They are not open to public use.

Mr. MADDEN. Mr. Chairman, will the gentleman yield?

Mr. HALLECK. No, I will not. The gentleman from Tennessee has the floor. I cannot yield to the gentleman from Indiana. I am sorry he feels this way about it.



Mr. DAVIS of Tennessee. I hope you will not take all my time.

Mr. HALLECK. I will not take it all.

I sat in a hearing on this proposition in the city of Gary, which the gentleman represents. I understand he has problems, that Gary's Chamber of Commerce is for this harbor but some other people up there are not. But I sat there with Governor Schricker, the then Democratic Governor of Indiana. I do not know whether the gentleman from Indiana was there or not, but I want to say this: There was unanimity of position of all of us from Indiana. The only thing I regret—I want to close by saying this. Probably I am foreclosed here today, but the people of my State are not going to be foreclosed and we are not going to forget it. There have been political manipulations from certain people in the other body that I say are unconscionable in an effort to defeat the accomplishment of a project in my great State.

You talk about spending taxpayers' money. The State of Indiana, the taxpayers of Indiana, have contributed to the building of harbors all over the United States of America.

All we ask is fair treatment.

Mr. MADDEN. Mr. Chairman, will the gentleman yield for one statement?

Mr. DAVIS of Tennessee. Briefly.

Mr. MADDEN. I am now quoting the first report of the Army Engineers of a year ago which, through the influence of former Secretary Humphrey, was withdrawn. In that report it is stated that 97 percent of the shipping through this particular location, if a port was built there, for the next 20 years 97 percent would be cargo in and out of the two steel mills. About 3 percent would go to southern Indiana.

Mr. DAVIS of Tennessee. Mr. Chairman, I refuse to yield any further. I have been more than generous. I decline to yield to anyone.

Mr. Chairman, I know I do not have any foes in this House. I sought in the beginning to suggest that, thinking so many Members of this House wanted to get home if at all possible by this weekend, and with the cooperation with the fine Members on the minority side handling this bill, and with the warm support of all the men on my side of this committee, we were asking you not to offer any amendments to increase this bill, with the assurance that we are going to have a bill early next year, because it is important; but collateral matters had come in. I was asking that you not discuss matters outside, and to show you my good faith—let us be reasonable. If we pass this bill this afternoon, you know what we are up against in this conference with the other body, I repeat, a conference committee headed by skilled legislators. The leadership has indicated rather informally to me that if we can handle with reasonable haste and yet intelligence and justice this particular bill, we have a good opportunity to adjourn this weekend. That would be a happy moment with all of us.

To show you my sincerity further, I want to say that I have prepared with some degree of care a statement covering the overall context of this bill.

I am not going to use it, but, Mr. Chairman, I am going to ask unanimous consent to extend my remarks at this point in the Record and to include what I wanted to say to you because I am going to be sincere and consistent the rest of this day in the efforts to do what I told you in the beginning all of us on both sides of the aisle had agreed to do as far as this committee is concerned.

H.R. 13273, generally referred to as the omnibus river and harbor and flood control bill, comes to the floor of the House after careful consideration by the subcommittees and the full Committee on Public Works. The bill is divided into two parts—title I, designated as the River and Harbor Act of 1962; and title II, designated as the Flood Control Act of 1962.

Title I adopts 71 river and harbor projects located in 25 States, with an estimated Federal cost of \$406,730,000. It also adopts eight beach erosion control projects in seven States, with an estimated Federal cost of \$1,775,800.

Title II adopts 86 projects for flood control, hurricane protection, and multiple purposes in 37 States, with an estimated Federal cost of \$2,307 million. It also provides for an increase in the monetary authorization for one comprehensive river basin plan, previously approved by the Congress, with an estimated Federal cost of \$3,700,000.

The projects adopted in H.R. 13273, both individually and collectively, comprise a valuable addition to the Nation's civil works program. The broad objectives of this program are the full and efficient development, utilization, and conservation of the Nation's rivers, and the protection and development of its coasts, as a means of advancing the national economy and enhancing the welfare of the people. The attainment of these objectives requires the formulation of comprehensive and unified plans for river basin and coastal improvement.

In the Nation's infant years the Corps of Engineers of the Army possessed the primary engineering know-how available to the Government. Hence, the corps was called upon—particularly by President Jefferson—to pioneer the development of the Nation's resources. It conducted explorations, established routes for roads and canals, and served as adviser to both the President and the Congress in the civil aspects of engineering. It was not until 1824, however, that Congress began to appropriate funds for direct Federal developmental activities. The small appropriation of that year, for improving the navigability of the Ohio and Mississippi Rivers by the removal of snags, marks the beginning of what has come to be known as the civil works program. For almost a century this program was confined to the improvement of navigation, the only type of internal improvement considered by Congress to be a responsibility of the Federal Government. Finally, in 1917, Congress authorized flood control work on the Mississippi and Sacramento Rivers. Not until 1936, however, was general flood control legislation enacted; although, in 1928, the corps was directed to make broad basinwide surveys for

flood control, navigation, and power development. These studies—commonly known as the 308 surveys—were the first Federal attempt to develop basinwide plans for multiple-purpose development. They had much to do with the gradual acceptance of the concept of comprehensive river basin development, and with the progressive broadening of the body of legislation made up of what are still designated the "flood control acts"; although they now actually provide the bulk of the legislative authorities under which the Nation carries out the comprehensive development of its great river systems.

Over the period of 138 years since 1824, the civil works program has contributed to the Nation's economic development by planning and constructing: 214 reservoirs providing 165 million acre-feet of storage capacity. 500 local protection projects—including the vast levee system protecting almost 24 million acres of flood plain land along the lower Mississippi River; 34 power installations having an aggregate capacity of 7 million kilowatts; 3.2 million acres of water area—summer season—which provided more than 100 million person-days of recreation in 1960, and which is being used more intensively each year; 22,500 miles of inland waterway which provided 123 billion ton-miles of low-cost transportation service in 1960; connecting channels between the Great Lakes which have converted them into a great inland sea providing 99 billion ton-miles of transportation service in 1960; 500 deep-draft commercial harbors on the shores of the oceans and Great Lakes; 250 small boat harbors for refuge, recreation and commercial fishing; shore protection works along more than 300 miles of coastline; and rescue and disaster relief work during great floods and other natural disasters.

In addition to the completed works mentioned above, the Corps of Engineers has under construction 172 new projects, including 62 reservoirs which will increase the aggregate storage capacity by about 46 million acre-feet, and will increase the capacity of power installations by nearly 4.5 million kilowatts—to 11.5 million kilowatts. A program of flood plain information studies was initiated during fiscal year 1962 to encourage States and local governmental entities to regulate the use of flood plain lands for the purpose of slowing down the growth of new flood problems.

The committee is convinced of the necessity for continuing study of the Nation's water and related land resource development requirements and of the necessity for continuing revision and expansion of the Nation's Civil Works Program to meet current and prospective needs disclosed by such study. The projects adopted by H.R. 13273 were formulated in this way. They are based primarily on investigations made by the Corps of Engineers in close coordination with States, other Federal agencies, and local interests, and completed almost entirely since adoption of the River and Harbor and Flood Control Act of 1960. Thus, these projects are based on the most up-to-date appraisals of needs—



both immediate and prospective—which it is possible to provide.

In the field of flood control the desirability of avoiding repetition of experienced damage and hazard to life is clear. Perhaps less clear is the role of the projects adopted by H.R. 13273 in bringing about the most effective use of our valley lands, so that we may capitalize on the compelling economic advantages attend upon their wise use. These works have been planned on the basis that flood control is a positive economic force in economic development rather than merely being a corrective measure.

Many of the reservoirs adopted by H.R. 13273 include storage designed to provide adequate supplies of good water, on schedule, to meet municipal, industrial, and agricultural needs. Substantial increases in low water flow will result from reservoir operation, with attendant improvement in water quality. The water supply and water quality control services which will be provided by the adopted projects also are positive forces in the National program for sound economic development.

Hydroelectric power facilities are included in those reservoir projects where economically feasible, to aid in serving growing municipal, industrial, and agricultural power needs.

The growth of public use of Federal land and water areas has been phenomenal in recent years. In 1961 public use of Corps of Engineers projects reached a total of 120 million visits, and water resource projects undertaken by other agencies served additional millions. The key role of water in outdoor recreational activity has been confirmed by the findings of the Outdoor Recreational Resources Review Commission. In recognition of public demand for outdoor recreational opportunities, substantially all of the reservoir projects adopted by H.R. 13273 provides for balanced basic recreational development. This will insure effective public use and enjoyment of the recreational potential which these projects will create.

In the field of navigation the projects adopted by H.R. 13273 are based on recognition of the importance of a sound transportation system to our economy, security, and general welfare, and the fact that each mode of transportation must play the role for which it is best suited.

The projects adopted for improvement of Great Lakes and coastal harbors will afford needed improvement and vitalization of these essential elements of our national transportation system. This is true also of the measures adopted for improvement of our inland waters.

Finally, the short protection measures adopted for beach erosion control and hurricane protection will serve to prevent irrevocable loss of beach areas, serious property damage, and hazard to life.

In summary, the committee considers H.R. 13273 to be a sound bill providing for essential continuing development of our Nation's water resources.

Mr. BLATNIK. Mr. Chairman, will the gentleman yield?

Mr. DAVIS of Tennessee. I yield to my warm friend on the committee who is chairman of the rivers and harbors section. We work together so well, I have yield to my colleague.

Mr. BLATNIK. Mr. Chairman, I want to say what I really know is in the hearts of so many of our colleagues and friends on both sides of the aisle in expressing not only the appreciation but admiration and genuine commendation to our able colleague and distinguished colleague, the gentleman from Tennessee who for years has carried the brunt of a tremendous burden in presenting these multibillion dollar public works projects that help the areas throughout the Nation. Few people realize the hearings that go on day in and day out requiring great patience and technical knowledge to go into all the details of the economic and fiscal feasibility of these projects in areas far removed from your district, Mr. Chairman—areas, yes, far removed from your own State. The manner in which you have conducted the hearings and the consideration of your very important committee and the fairness and consideration that you have shown to every and all of your colleagues regardless from what part of the country they come from reflect great credit on the gentleman from Tennessee and it is proof of his sound knowledge and belief that anything that upgrades the resources of the country to provide for a freer and more efficient flow of commerce and traffic on the waterways of the country and anything that protects life and property in areas subject to flood enhances the economic development of those areas and contributes not only to the improvement of the particular area but to the sum total of the country.

Mr. JONES of Alabama. Mr. Chairman, will the gentleman yield?

Mr. DAVIS of Tennessee. I yield to the gentleman.

Mr. JONES of Alabama. Mr. Chairman, I have served on the Committee on Public Works for 16 years. During the course of my tenure on the Committee on Public Works, we have brought biennially public works proposals with a scheme of development of our water resources which are so immensely important to our Republic. During my tenure on the committee, I do not think I have ever worked with or sat along side any member who is so knowledgeable of the subject, and so articulate in his expression and understanding of the subject, so patient in his approach and who has given so much even to an infinite degree to research and study of this enormous problem than the distinguished gentleman from Tennessee, chairman of this subcommittee.

There is not a section of the United States that has not been a recipient of his good work. There is not a section that has not benefited by his zeal and his earnestness and his dedication to the proposition of orderly and judicious prosecution of water resources development.

So, Mr. Chairman, he is a tower of strength in this work that we seek here to do, and certainly, Mr. Chairman, we all adore him and find a great deal of

satisfaction that he has directed this phase of the work of the Congress that has had so much to do with making this a great Nation.

Mr. WICKERSHAM. Mr. Chairman, will the gentleman yield?

Mr. DAVIS of Tennessee. Briefly.

Mr. WICKERSHAM. I would just like to compliment the gentleman for his splendid work and to tell him and the other members of the committee that we appreciate the fact that the Waurika Project has been included in the bill. It was considered on the Senate side, hearings were held over there before the Interior Committee, and we appreciate the item of \$24 million for the Waurika Project.

Mr. DAVIS of Tennessee. I remember the gentleman talked to me about that.

Mr. Chairman, I am very grateful to my colleagues on the committee for the fine things they have said about me. Any man would be unappreciative indeed not to be moved by them.

Now I am going to practice what I tried and insisted on preaching earlier, I am going to sit down. I hope my friends on the minority side will have better fortune in controlling and limiting time than I have been able to accomplish on this side.

Mr. Chairman, I yield such time as he may desire to the gentleman from Alabama [Mr. JONES].

(Mr. JONES of Alabama asked and was given permission to revise and extend his remarks.)

Mr. JONES of Alabama. Mr. Chairman, it is appropriate at this time in connection with H.R. 13273, the omnibus rivers and harbors and flood control bill, to restate some basic principles which I believe should underlie our national water resources policy.

Our national water policy is now being shaped. Only in recent years have we become aware of the need for such a policy and taken action to assess our resources in light of probable future needs.

History shows us, of course, that water has dominated human life. Americans are familiar with the impact of our river systems, harbors and rainfall on the social and economic development of the Nation. Water, or its absence, has shaped our destiny.

Throughout the 19th century and the early decades of the present century, we took our water resources for granted. In most of America, water was abundant. There seemed to be no need to husband or develop supplies. We used our water carelessly without any thought of the future.

But only a few short years ago we came to our senses and began to analyze the cold facts. We discovered that our water resources were not unlimited in the face of a rapidly expanding population and the demands of our swelling industrial complex. Surveys and studies showed us that there was no doubt about it; we must design a national water policy to enable us prudently and efficiently to employ this key resource.

It should be apparent to all of us today that the health and welfare of the American people in the years ahead will



be dependent on the availability of adequate domestic and industrial water supplies. It follows, then, that we must construct a national water policy that will contribute to a sound regional and national development of this vital resource.

We must intensify our efforts to develop our water resources, to perfect flood control measures, to improve our waterways and our harbors, to expand existing hydroelectric projects and initiate others, to reduce water pollution, and to preserve areas of our lakes, rivers, streams and coastal waters for recreational purposes.

Proper water development is exemplified by the TVA. TVA is a model not only for our country but has been an example for similar development schemes throughout the world. The measure of its success has been demonstrated in all of its aspects. It is a source of pride to me to point to TVA as a model in satisfying water resources development in all of its ultimate needs and uses.

We can no longer enjoy the luxury of misusing our water resources.

Certainly the Federal Government has a clear responsibility for safeguarding and developing national water resources. In the national interest it must be the overseer of these resources for the ultimate benefit of all. Management responsibilities and duties may be shared with State and local governments and with private enterprise. But the primary powers must remain with the primary responsibility which is held by the Federal Government. At the same time there must be unity of approach as among the local, State, regional and national levels.

The report of the President's Water Resources Policy Commission, 1950, said:

The national interest in water resources development is obviously large. It includes the benefits which accrue to the Nation as a whole, such as the strengthening of national security and the national economy, the conservation of soil, water, forest, and mineral resources, the encouragement of a wider and more economical dispersal of industry, the provision of opportunities for new investment and thus for employment, the provision of an adequate supply of food, fibers, and electric energy at reasonable prices, and the expansion of opportunities for the public enjoyment of recreation and wildlife. The amount of the Federal Government's contribution to water resources development should be determined accordingly.

Our interior waterways and our coastal waterways with their associated facilities form a critical transportation complex of paramount importance to agriculture, industry, and the national security. It is an essential element of our national policy that our navigable water resources be developed and used to the fullest economical extent. Low-cost water transportation is a significant factor in the location and establishment of industries today—and will be in the future—as it has been in the past.

A national water resources policy, then, must be designed to maintain and improve these important links in America's overall transportation pattern.

Flood control must be another element of this national water policy. Devastating floods have inflicted great human and economic losses on our Nation. An effective flood control program would preserve human life and effect huge annual savings by protecting the Nation's property, its soil, and its forests. Further, it would conserve our dwindling water supplies. Flood-producing conditions, the effects and repercussions of floods, and the flood-management measures are almost always of much more than local concern. The problem must be tackled through feasible comprehensive river-system or regional water-resource development plans.

Our Nation has a great future need of power capacity, part of which can be satisfied through hydrodevelopment. Another element of our national water policy, then, must concern itself with development of electric power. The economical and timely expansion of electric power will have most fundamental effects on the American economy, including agriculture. Power is one of the most important of all multiple-water-development purposes from the standpoint of bringing development projects and programs into the economically feasible and self-liquidating ranges.

It is obvious that the protection and expansion of our domestic, industrial, and public water supplies must be a primary mission of our national water resources policy. Our water requirements are growing and will continue to grow and we must provide more water by careful management of our present resources and by finding new resources.

In pressing development of our water resources we must be alert to the increasing needs of Americans for recreation areas and to the necessity of conserving our fish and wildlife. Our recreational resources must not be merely preserved, they must be enhanced and expanded. Again, the TVA is a fine example of the substantial and beneficial results that can be obtained through recreational planning and development coordinated in place and time with that of other water uses.

Mr. Chairman, I feel deeply that we must not falter in our pursuit of a comprehensive, fully rounded water resources policy. We are moving in the right direction but we must be unremitting in our determination to reach the final goal. We must continue to move ahead.

Mr. AUCHINCLOSS. Mr. Chairman, I yield myself 10 minutes.

Mr. Chairman, the Committee on Public Works has very great responsibilities covering a wide area. It considers problems affecting the physical well-being of every part of the United States and reaches decisions on projects seeking the solution of these problems. Every Member of the House has perplexing questions for the development of his district and introduces legislation for their solution which reaches the Committee on Public Works. It is indeed an important though not spectacular committee.

Consider for a moment the scope of this committee's authority. It has the policy of highway construction throughout the country under its jurisdiction. The planning, building, and operation of this vast road system requires hard and intensive study in order to promote a sound expanding national policy in accord with the policies and laws of the various States. This program alone makes this committee an important one. But there are other responsibilities.

The Committee on Public Works must consider the construction of public buildings in all parts of the country and it is by no means a simple task to determine where a building should be located, its purpose, how much it should cost, and what agencies of Government should occupy it. These problems are not easy of solution, but require diligent research and real foresight. New Government buildings do not just happen, they are the result of careful planning and study.

Then there is the enormous problem of flood control of our rivers and lakes, which comes under the jurisdiction of this committee. Each one of these flood control projects presents different problems, frequently involving the construction of public powerplants, which require careful scientific study by men specially trained in that field of experience. The Corps of Army Engineers have time and again proved themselves highly capable to carry on such work and reach constructive conclusions, and I venture to state that it is the best qualified group in the world for this type of work. I am sure there are none better. This engineering knowledge is most important because the solution of this type of problem is technical and costly, and our taxpayers' money would be extravagantly wasted if scrupulous care was not used in the planning for the future. The Public Works Committee should never report out for the consideration of Congress any project of flood control without a completed report from the Corps of Army Engineers together with the approval of the Bureau of the Budget.

Then there is also the great question about the maintenance of the Nation's rivers and harbors and the protection from erosion of our shorelines, in Great Lakes as well as along the coastline. Here again keen analysis by trained men is required to reach sound and farsighted conclusions. Like the flood control problem, the rivers and harbors projects are costly and care should be taken in reaching conclusions for their solution. It is the responsibility of the Committee on Public Works to make sound and well-supported recommendations concerning these matters, and it should never approve a report to Congress on any project without a full report from the Corps of Army Engineers.

The bill H.R. 13273 now under consideration contains many fully authenticated projects in various parts of the country covering flood control, rivers and harbors maintenance and protection from beach erosion, but unfortunately it contains a few projects which do not have the final approval of the Corps of



Army Engineers and the Bureau of the Budget. These projects are reviewed in the supplemental report signed by the minority members of the committee, so I shall not discuss them in detail. In these remarks I wish to stress the responsibilities, moral and legal, of the Committee on Public Works, and emphasize the fact that such unauthorized projects should not be included in any bill for the consideration of the House.

In accord with our system of operation, the House relies on its committees to study carefully matters submitted to it for consideration, and expects definite standards to prevail for the protection of all. As soon as projects are included in the so-called omnibus bill which fail to meet standards based on the approval of responsible and experienced Government agencies, then this measure can properly be called the pork-barrel bill to the everlasting humiliation of all of us. An omnibus bill should provide for the constructive benefit of America, based on sound reasoning and study and should not contain measures for the political aid of any individual Member with no recommendation of any kind from anyone. To maintain the dignity of the House of Representatives and fulfill our responsibilities as elected Members of the Congress, we should refuse to permit the authorization of taxpayers' money for projects without the approval of any qualified Government authority.

I have served on the Public Works Committee and its predecessor committees for about 20 years, and I am proud of its work and its responsibilities. I must confess however that I do shudder and my blood pressure rises when I read in the press that the committee has reported out a pork-barrel bill. I am sure my colleagues join with me in that feeling, and we should act together in protecting the fair name of this committee and the honor of this very great legislative body and thereby maintain the prestige of our Government.

(Mr. AUCHINCLOSS asked and was given permission to revise and extend his remarks.)

Mr. AUCHINCLOSS. Mr. Chairman, I yield 10 minutes to the gentleman from Florida [Mr. CRAMER].

Mr. ROBISON. Mr. Chairman, I make the point of order that a quorum is not present.

The CHAIRMAN. The Chair will count. [After counting.] One hundred and three Members are present, a quorum.

The gentleman from Florida [Mr. CRAMER] is recognized for 15 minutes.

(Mr. CRAMER asked and was given permission to revise and extend his remarks.)

Mr. CRAMER. Mr. Chairman and Members of the Committee, we have before us today a \$2.3 billion omnibus rivers and harbors bill. In that bill, as I previously stated, there is in controversy \$144 million, such figure representing the dollar value of the projects involved in controversy.

Mr. Chairman, I appreciate the remarks of the gentleman, my distinguished colleague and friend from Tennessee [Mr. DAVIS] for his sincerity

and his desire to attempt to get out a good bill. I would say that it has been the objective of the minority throughout the consideration of this bill, and particularly in view of the fact that it has been brought to the floor of the House at an unprecedentedly late period in this session of the Congress, without any public hearings, without any opportunity even for Members of Congress to testify, that it is essential in protecting the integrity of the great Committee on Public Works of the House of Representatives on which I have had the privilege of serving for 8 years, and the integrity which I think is essential that we protect, because we have the duty of protecting the rights and interests of the taxpayers of America and to make sure that this Congress, this House and this important committee, is never subject to the charge of pork barreling, to the charge of favoritism, to the charge of playing politics with public works projects, to the charge of not getting a dollar's worth of value for every dollar of the taxpayer's money spent.

Mr. Chairman, it has been my objective throughout as a member of this committee to make certain that those fundamental obligations, I believe, of our committee and certainly of every member on it, are observed. That is why there is controversy; that is why there is a difference of opinion in this particular bill as it relates to these particular projects.

Mr. Chairman, I think it is the duty of the minority when it believes the majority is not following the basic concepts which I have just pointed out to attempt to see that they are observed, particularly in a situation where you here in the last few days of the session allow to be brought up a \$2.3 billion bill. The only hope of passage of the bill being that controversy is left out of the bill, the hope for passage being that certain ground rules are established and observed which do not subject the committee and this Congress to charges along this line. I say that as the bill is presently written it does involve pork barreling, favoritism, playing politics with the taxpayers' dollars. With reference to those ground rules I thought there was an understanding concerning them as we started consideration of this legislation at this late hour.

Mr. Chairman, I had understand that the rules to be observed were, No. 1, there would be no project contained in the bill that was controversial, for the obvious reason that if there is one which is controversial, the people who oppose it should have a right, under our democratic form of government and system, to be heard. That is the least their right should be. But everyone of those people was denied the right to be heard under this bill. I trust and hope, and I am sure the gentleman from Tennessee [Mr. DAVIS] agrees with me, that this shall not be considered a precedent by the great Committee on Public Works of the House of Representatives—the manner in which this bill has been considered.

It should not be thought throughout this Nation that those who are interested

in hundreds of millions and even billions of dollars of expenditures, concerning which there are substantial differences of opinion that those people who have those differences of opinion will be denied, and even the Members of Congress denied, the right to be heard on these projects.

So that is why I, for one, have insisted that the ground rules that I thought had been established be observed. That is why we are opposing these projects, because on them the ground rules were not observed. That is why we fought as hard as we did in the subcommittee and in the full committee to try to make this a clean bill, with good projects, sound projects, with a preservation of the rights of the taxpayers, a clean bill that could pass without controversy.

Well, it is interesting to note how this bill gets before us at this late date—and I am being careful in the words that I use. So far as I can determine, the reason this bill was not properly considered 6 months ago, as we usually do on omnibus rivers and harbors bills, with persons who are interested being given the right to testify, and with adequate consideration being given to all projects, with proper legislative procedure, is that it was held up for a \$900 million pork-barrel, grab-bag bill that passed the House a few weeks ago. We spent all our time trying to push through a program that is unsound, that delegates to the President unlimited powers, using the taxpayers' money at the same time, without proper congressional authorization. We spent half of this session working on that \$900 million pork-barrel bill rather than considering a sound approach, based on meritorious projects in an omnibus rivers and harbors bill, it being the duty of our committee to do so this year, on a biennial basis.

As a matter of fact, I was informed, and I think authoritatively so, that it was generally advised that we would not even have an omnibus rivers and harbors bill if the \$900 million pork barrel, grab bag, handout bill did not pass. Well, it has passed. And I am one to say that that is a bill that is going to come back to haunt this Congress and the Public Works Committee, because it gave to the President the powers that are reserved to the Congress, that of authorizing the projects, precisely what we are doing here today and should be doing in other areas. But that is past history.

Now we are faced with a \$2.3 billion bill in which there is \$144 million in controversy, in the last few days of the session, when there is not an opportunity properly to consider all the controversies involved; and due to the fact that not to strike out these projects will jeopardize the entire bill, I think the best wisdom is to knock them out, particularly in view of the statement on the part of the distinguished gentleman from Tennessee to the effect that we will be hearing another omnibus rivers and harbors bill with other projects early next year. It also might lead you to ask why has it been essential to include a number of projects in this bill, and in particular the \$144 million worth of projects involving controversy?



It is important that we protect the integrity of this bill, not only because of our responsibility to the taxpayers of this Nation but also your Representatives of the House in conference are going to have to face up to the other body. And again I say that as far as I can see, the only hope of getting a bill passed is to get one without controversy and try to hold the line. So far as the House bill is concerned, we can only preserve the House bill if we can take a position based upon merit, based upon the fact that we observed two rules. We made them and stuck by them because they are right; Rule No. 1 being noncontroversial projects on which hearings thus would not necessarily be justified.

Rule No. 2, projects that have been cleared by executive agencies.

That is what our amendments will do. Thus we can go to conference, and we can say to the other body we have protected the integrity of our bill by noncontroversial projects, and only those reported, and therefore we can insist on the other body's doing the same thing in a sound approach in the last few days of this session.

What are the projects in controversy? Burns Creek, in flood control, \$52 million. China Gardens, flood control, \$74,777,000. Jones Inlet, beach erosion control. Estimated cost, nobody knows what; minimum \$4 million, maximum \$17 million. Port Elizabeth, \$230,500, annually.

These total \$144 million, exclusive of the continuing annual costs.

I want to say something very briefly concerning the rivers and harbors projects, two of which I referred to, Fire Island and Port Elizabeth, that do not conform to the basic ground rules of this bill. The distinguished gentleman from California [Mr. BALDWIN], ranking Republican on the Flood Control Subcommittee, will discuss the Burns Creek and China Gardens projects, along with the gentleman from Iowa [Mr. SCHWENGEL]. Those two projects violate the rule of being noncontroversial. There could not be two more controversial projects before the Congress. They have no business in this bill when the effect of having them in this bill is to jeopardize all public works projects in the omnibus bill that is here.

Let us take Fire Island, \$17 million. I invite your attention to the minority views in the committee report. There is not any politics in my approach to this. As a matter of fact, the two projects I propose striking out are in Republican districts, and I freely admit it. I still say if we are going to protect the integrity of this bill, a very good bill that abides by basic ground rules, if it is essential to pass a bill at this late stage in the session, then we should take out projects that do not conform to those rules, be they Democrat or Republican.

I say to my distinguished colleagues who are Republicans, who I know are interested in these projects, and I appreciate it, that I trust they will go along with the bill, at least the minority who are insistent on certain ground rules being followed.

Let us discuss, for instance, Jones Inlet. If you will refer to page 240 of this report, you will see a discussion of Fire Island Inlet or Jones Inlet, N.Y. I have had the privilege of visiting this project. I am very sympathetic to the project. I realize a solution must be found. But what is the status of the study or survey that is presently underway pursuant to previous congressional authorization? There has been no clearance by any Government agencies. As a matter of fact, the testimony before our committee was to the effect that the witnesses representing the Erosion Board and the Corps of Engineers could not even testify to what type of project they intend to construct at this location. That you will find in the minority views.

Secondly, the best estimate of cost was—imagine this, we are supposed to act on a project with a best estimate of cost as between \$4 million and \$17 million. That is as close as they could come to it.

The survey is the first step on any project. If you will turn to page 238 of the report, you will find every step a project must go through in order to conform to the ground rules. This project has not gone through any of them.

You say, Why observe ground rules? Because you as Members of Congress yourselves have said our committee should observe ground rules, and you have made it basic law. On the bottom of page 239 you will see reference to the fundamental basic law, which is the instructions to the committee in considering these projects. The report states:

In section 202 of the River and Harbor and Flood Control Act of 1954, it is declared to be the policy of the Congress that: "No project or any modification not authorized, of a project for flood control or rivers and harbors, shall be authorized by the Congress unless a report for such project or modification has been previously submitted by the Chief of Engineers, U.S. Army, in conformity with existing law."

I know what the answer is going to be. It will be that we have waived this in other cases.

But we have never waived it to my knowledge in a case similar to this where you have last minute legislation in order to become a law of necessity. It should be noncontroversial and should obey the ground rules. So that is the difference. We are trying to pass a bill involving good projects in the late hours of the session and that is the objection of the minority.

Therefore, I will at the proper time offer an amendment, as the second ranking Republican member of the Rivers and Harbors Subcommittee, to strike out Fire Island Inlet or Jones Beach. If you look at the bill, you see that there is no cost in it. There is no figure because there is no way of knowing what the figure is.

Secondly, I will offer an amendment to strike out the Port Elizabeth project. It is a maintenance project. Yes, it is a small one. Yes, there is a Republican who is interested in it. The cost is \$230,500 annually. Elimination of this project will preserve the integrity of this

bill and so we can face the people of this Nation and the taxpayers and say we voted out a bill that was sound and was not a pork-barrel approach to public works projects.

So I will offer an amendment for the purpose of striking that out.

I have one other proposal which I intend to use whatever parliamentary procedures are available to me to try to get the Congress and our committee to consider properly the amendment written into the bill at the last minute without any hearings and without any report from the agencies. It appears on page 13 known as section 102 which completely amends the beach erosion control acts and permits 100-percent participation by the Federal Government for any damages caused by beach erosion but limited only to beach damage as a public function—not including any other public function. If you have a firehouse or city hall damaged by erosion, it does not conform and it cannot qualify for the funds. But if you have a beach and a park—it does. That does not make any sense to me at all.

It also provides on page 15, lines 11 through 13 direct appropriation of \$3 million to be obtained from other projects that have already been appropriated for by the Congress.

Transfer fund authority, which I intend to object to at the proper time.

Mr. BECKER. Mr. Chairman, will the gentleman yield?

Mr. CRAMER. I am delighted to yield to my distinguished friend and colleague, the gentleman from New York, who I might say has shown a great deal of interest in the Jones Inlet project, and, as a matter of fact, he was our host when we went to Jones Inlet and Jones Beach. Nothing has been harder for me since I have been in the Congress to stand up here and oppose a project that I know my distinguished colleague is interested in and which is meritorious, I believe, if the Engineers had a chance to come up with a program.

Now I am glad to yield to my friend, the distinguished gentleman.

Mr. BECKER. I would be the last one to quarrel with my colleague from Florida on the matter of procedure and rules. The only point I would like to make insofar as the Fire Island-Jones Beach Inlet project is concerned, the erosion project, is that this is an authorized project and that we have made appropriations to complete the first phase of this project. What we are actually doing here or are attempting to do is that because of studies previously made by the Army Engineers and the engineers of the State of New York, to change the manner by which the project is to be continued rather than by dredging, which is what took place in the first phase, but by putting in some type of bypass pumping operation that would be permanent and always keep the channel clear as well as providing feeder sand for the beaches. That is why I hang my hat on the necessity of this project now so that we can continue with it, and next year when there will be no authorization bill, we at least can complete the study



and then ask for the necessary appropriation.

Mr. CRAMER. May I say to the gentleman, this is a review report, but that report has not been refused. We do not know what it contains or how much it will cost, and it will not be available for 6 months. I will say to the gentleman, I will be the first one to support his proposal as a separate bill, if need be, next year if the Engineers indicate it is sound and if the cost is reasonable.

Mr. BECKER. The gentleman says this is estimated to cost between \$4 million and \$17 million. We will have to come back here next year for the necessary appropriation. Then we will know what the cost will be.

Mr. CRAMER. I will say to the gentleman from New York, as the gentleman from Tennessee indicated, that we are going to have a bill next year, we are going to consider a bill next year. I would support a proposal for the gentleman to put in a separate bill. Then it will go through the proper procedure.

Mr. HALLECK. Mr. Chairman, will the gentleman yield?

Mr. CRAMER. I yield.

Mr. HALLECK. Mr. Chairman, perhaps I have said too much already, but I have got to say this much further. The gentleman talked about ground rules. If there is one Member of this House who has tried to play by the ground rules, I have, but I want to add that the patience of some of us is being sorely tried.

I refer again to the effort that the officials of the State of Indiana have made for the past 25 years and more to establish a deepwater port on Indiana's shore of Lake Michigan.

If you want to know what the ground rules are, I refer you, Mr. Chairman, to page 238 of the report where the eight steps involved are set forth.

Step No. 1: Assignment of investigation by Chief of Engineers. That was done years ago for Indiana.

Step No. 2: Public Hearings by District Engineer. We have had hearings, and hearings, and hearings.

Step No. 3: Investigation by District Engineer.

Step No. 4: Review of Division Engineer and issuance of public notice.

Step No. 5: Review and hearings by Engineer Boards.

Step No. 6: Preparation of proposed report by the Chief of Engineers and review thereof by the affected States and Federal agencies.

Step No. 7: Transmittal of report to the Bureau of the Budget.

As of late June of this year, Mr. Chairman, all of these steps were behind us, as far as this project is concerned. Then we come to Step No. 8: Transmittal of report to Congress.

I just want to say that while I recognize the necessity of following the ground rules, when you come to that final step—and I say a case for the building of this harbor has been made—when you come to that final step, the report from the Bureau of the Budget, I am getting to the point where I just do not believe that the Bureau of the

Budget should have the final determination for whatever reasons—they may be political or otherwise, and I happen to think in this case they have been political—and not against me, since it is only incidental that this harbor is in my district. The whole State of Indiana has been for this, they are for it now.

I just want to serve notice that if the State of Indiana from our Governor on down, and the bipartisan port commission, are to be foreclosed here today, I am not going to continue to take it lying down. They will either send up a report in compliance with the report of the Army Engineers, a carefully drawn report, or we may forget about the ground rules.

I know that this report from the Bureau of the Budget should have been forthcoming weeks ago, and as I said to the chairman of the committee, I was confident it would be here. It is not here.

Without going into any more detail I just want to conclude by saying that my State of Indiana is not going to longer be foreclosed. All of this talk about how the harbor would just be built for some selfish interests is absolutely without foundation. Indiana is going to have its harbor one way or the other.

Mr. CRAMER. Let me say to the gentleman that I appreciate his problem. This has been the reservation I have had, and illustrates it clearly—the reservation I have had about the manner in which this bill has been considered at this late date, in this short period of time.

Who has controlled what has gone into this bill? The gentleman from Indiana put his finger on it by using his project as an example. The agency that controls what has gone into the bill in the last 3 weeks of submission of new projects has been the Bureau of the Budget. There is no question about that. They have selected the projects to come up. There have been some Republican projects. As a matter of fact, I had a project that has been sent up, and there have been other projects. But the Bureau of the Budget has control of what should be considered under this short procedure in the consideration of this authorization bill and is the best evidence of the weakness of considering the bill in the manner in which it has been considered. I can remember the criticism offered the Bureau of the Budget under President Eisenhower, but I do not hear any today.

Mr. DAVIS of Tennessee. Mr. Chairman, I yield myself 3 minutes.

I want to say that we have agreed to use only 10 minutes, and I regret we have used 25 minutes. But that was due to the nice things said about me by other Members.

I want my good friend, the minority leader from Indiana, to feel in his heart that the gentleman from Tennessee tried to be generous in yielding to him, because if any man or woman in this House has any doubt about whether he has made his case for the public harbor at Burns Waterway in Indiana I would be the most surprised person in world. But, trying

to keep our agreement, I want to announce now, Mr. Chairman, that there will be no further requests for time on this side in general debate. We hope to proceed as quickly and as orderly as possible when the bill is being read for amendment.

Mr. GROSS. Mr. Chairman, will the gentleman yield?

Mr. DAVIS of Tennessee. I yield to the gentleman from Iowa.

Mr. GROSS. This is a \$2,300 million bill. What is the reason for all of this circumscription of time on the gentleman's side of the aisle? I assumed you wanted to tell us what is in the bill in detail. I am surprised you only asked for 2 hours of general debate. We used an hour and a half on a \$400 million deficiency appropriation bill a little while ago. What is the deal? What is going on?

Mr. DAVIS of Tennessee. We are endeavoring to cooperate, to dispose of the business of this session. I stated in the beginning that this was a big bill. The gentlemen on the other side of the aisle have already stated their position. The gentleman from Florida, who always states a case well, has referred to four objections to this bill on which they are going to lodge objections, plus a fifth. When the point of order is raised on the fifth, I can say to him now that it will be conceded, so there will remain four.

May I say very humbly when this matter is presented and the objections on the other side of the aisle are stated under a limitation of time, and when we are standing on the bill as is, asking that there be no further additions, recognizing that we are going to be up against a bill in the other body providing more than a billion and a half additional dollars, we will do our dead level best in conference to hold our ground. I do not think I could be more sincere in any statement I can make to the gentleman from Iowa [Mr. GROSS] for whom I have the highest regard.

Mr. AUCHINCLOSS. Mr. Chairman, I yield 10 minutes to the gentleman from California [Mr. BALDWIN].

(Mr. BALDWIN asked and was given permission to revise and extend his remarks.)

Mr. GROSS. Mr. Chairman, will the gentleman yield?

Mr. BALDWIN. I yield to the gentleman from Iowa.

Mr. GROSS. I still do not have an answer to my question as to why this attempted restriction of time. What is going on here today? Now, January, February, March, April, May, June, July, August, September have gone and this is October. Where has this bill been that it must be rammed through as far as time is concerned on an almost take-it-or-leave-it basis?

Mr. BALDWIN. I believe the gentleman from Iowa was querying the chairman on these points, and I shall yield to the chairman of the subcommittee, the gentleman from Tennessee [Mr. DAVIS], on that point.

Mr. CRAMER. Mr. Chairman, will the gentleman yield to me?



Mr. BALDWIN. I yield to the gentleman from Florida.

Mr. CRAMER. I think I tried to explain it. It has been in the deep freeze. The only thing that thawed it out was the \$900 million pork-barrel bill, as far as I am concerned.

Mr. GROSS. Mr. Chairman, if the gentleman will yield further, I will say that while it is late in the session, you may be able to make speed by proceeding moderately this afternoon. I will say this to the members of the committee, I would like to get out of Washington and to Iowa as well as anyone else. But I do not like the kind of situation that I see developing. If this bill is going to be rammed down our throats without adequate explanation under the 5-minute rule, and under a general debate, the timetable for adjournment can be all out of gear, as far as I am concerned.

Mr. BALDWIN. Mr. Chairman, first I would like to say that it has been a privilege again for me to serve as the ranking member on the Flood Control Subcommittee of the Committee on Public Works, and to work with the Chairman of that Flood Control Subcommittee, the gentleman from Tennessee [Mr. DAVIS]. The gentleman from Tennessee has always been very fair to me. It has been a privilege for me, and a pleasure, to work with the gentleman.

Mr. Chairman, I would like to say that as far as the procedure under which this bill was brought to the House floor is concerned, the procedure was that because of the inadequate time available to the committee from the time the hearings started, there being only about 2½ weeks available for hearings, that both subcommittees would only hear the Corps of Engineers and occasionally a Member of Congress. In many cases Members of Congress were asked to file statements and told that there was inadequate time in which to be heard.

Mr. Chairman, this procedure is all right for projects that are noncontroversial. I do not have any objection to the procedure for that type project. But toward the end, particularly the last day of the Flood Control Subcommittee hearings, a number of extremely controversial projects were added to the agenda, and brought before the committee.

Mr. Chairman, of all the 167 projects in this bill in my opinion the most controversial of any of them is the \$52-million Burns Creek project in Idaho. I would like to mention just briefly the history of this project, because I think it is important that all Members of the House be aware of it.

Mr. Chairman, this project has been pending before the House Interior and Insular Affairs Committee for four Congresses. The first bill on this subject was introduced in the 84th Congress. It was before the Interior Committee, but there was no action taken on it.

In the 85th Congress the bill was again introduced. A subcommittee of the Committee on Interior and Insular Affairs held 2 or 3 days of hearings on it. However, the committee took no action upon it.

In the 86th Congress bills were again introduced and a subcommittee of the House Interior and Insular Affairs Committee held about 11 days of hearings and meetings on it.

Although the subcommittee acted, the full committee did not take action upon it. In the 87th Congress, this Congress, the project was again before the full Interior Committee, and the Interior Committee last year held 4 days of hearings upon the project. This year, in February, the Interior Committee voted on the project and voted it down by a vote of 17 to 14.

After that history as a Bureau of Reclamation project before the House Interior Committee, this project suddenly blossomed out as a Corps of Engineers project. The only possible conclusion that I can come to is that it suddenly was transferred from the Bureau of Reclamation to the Corps of Engineers because it was defeated by the House Interior Committee.

The Corps of Engineers sent up a report to our committee just a week before the end of the hearings submitting this project to our committee. On the last day of the hearings the committee heard the Corps of Engineers only—no outside witnesses. The following day, two Members of Congress, one for it and one against it, testified briefly. One other Member had written the committee for the opportunity to be heard on the day that the hearing with the Corps of Engineers occurred, but he was not even given the opportunity to testify before the committee. In the committee files are requests for the opportunity to be heard from the United Mine Workers of America who in their letter said that they were opposed to the project and wanted the opportunity to be heard; a letter from the Electrical Workers Union, who wanted the opportunity to be heard against the project and were denied that opportunity; a letter from a coal company in Wyoming, that stated in their testimony last year that the effect of the Burns Creek project would be to reduce the mining of coal to the extent of 250,000 tons of coal per year, the company being the one which has a contract with a private power company that was going to serve some of the area. That company was not given the opportunity to be heard.

A letter was also on file before the committee by the Utah Power & Light Co., the company that serves some of the same area and now has a private power project under construction. That would be a 150,000-kilowatt plant which would be available in a few months and would serve some of the same area. And that company was not even given the opportunity to be heard.

Whatever the merits of this project may be, the Public Works Committee as a committee of the House of Representatives owes an obligation on controversial projects of this type to give the interested witnesses the opportunity to be heard.

Whether we agree with them or we do not agree with them, certainly this House and our committee owes the obligation

to interested witnesses to give them the right to be heard. Once we give them that right to be heard, then we have the right to come to a decision, whether it is for or against their point of view. But to take a project and throw it into a bill that has had the controversial history like this has and bar interested witnesses from the opportunity to be heard, in my opinion, is unforgivable. This is not the way this Congress, in my opinion, should handle this type of project.

This project is opposed by the State of Utah. It is opposed by the State of Wyoming. The record of the hearings before our committee, just with the Corps of Engineers present, shows in the statement of the Corps of Engineers itself that both the States of Utah and Wyoming are opposed to the project.

This project therefore is before this House today with interested witnesses having requests on file with the committee 3 months ago that were never given the opportunity to be heard. Certainly we owe them the right to be heard.

When this was a Bureau of Reclamation project, the Bureau of Reclamation came before the Interior committee and said this was a 97-percent power project. The Bureau of Reclamation last year in the House Interior Committee testified before the House Interior Committee and stated that there was no flood control in the plans whatsoever, it was 97 percent power.

After the Interior committee turned it down in February it blossomed out as a Corps of Engineers project. The Corps of Engineers did not have the time to make a new design. They took the Bureau of Reclamation design, and they testified that the Bureau of Reclamation would build this project. Since they testified the Bureau of Reclamation would build and operate this project, it seems even more clear, therefore, that basically the only reason it was transferred from the Interior Committee to our committee was that the Interior committee had already defeated the project. The Corps of Engineers suddenly said when they came before our committee that this project had some flood control in it, but even after that it still had some 85 percent power in the project.

The United Mine Workers said that the private powerplant to be constructed and now in process of construction at Kemmerer, Wyo., will serve some of the same area. If the Burns Creek project is constructed it will reduce the consumption of coal by 250,000 tons a year and, therefore, deprive those coal miners of their occupation.

There was some testimony in one of the hearings before the Rules Committee that the Utah Power Co. and another plant use gas. The actual facts of the matter are that the Kemmerer plant in Wyoming, which is to serve some of the same area, is being designed to use coal exclusively. That was the testimony in the Interior Committee last year, and that testimony has not been refuted from any source.

Certainly the United Mine Workers have a right to be heard, the electrical workers have a right to be heard, the coal



company has a right to be heard, and the private power companies that have been serving some of the same area have a right to be heard. Then we can make a decision, whatever it may be, in view of the testimony.

In this bill there are five projects in the State of Idaho amounting to \$234 million.

Mr. HARDING. Mr. Chairman, will the gentleman yield?

Mr. BALDWIN. I would like to finish my statement. The chairman of the committee said he had 30 minutes remaining.

Mr. HARDING. The chairman said that time would be yielded back. If the gentleman will not yield to me, I will make the point of order that a quorum is not present.

The CHAIRMAN. The gentleman from California refuses to yield.

Mr. HARDING. Mr. Chairman, a point of order.

The CHAIRMAN. The gentleman will state it.

Mr. HARDING. Mr. Chairman, I make the point of order that a quorum is not present.

The CHAIRMAN. The Chair will count.

Mr. HARDING. Mr. Chairman, I withdraw the point of order.

The CHAIRMAN. The point of order is withdrawn. The gentleman from California is recognized.

Mr. BALDWIN. The point I wanted to make in conclusion was that the State of Idaho has five projects in this bill amounting to \$234 million. The total bill is \$2,307 million. That means the State of Idaho has more than one-tenth of the total monetary value in this whole bill.

According to the 1960 census there are 600,000 people in the State of Idaho. If you will divide 600,000 into \$234 million you will find that there is in this bill for every citizen in the State of Idaho \$350 per person. If you will review the other 49 States in the Union and divide their total population into the total amount of money in the bill for the other 49 States, you will find the average sum of money in this bill per person for the other 49 States is \$12. Therefore, the State of Idaho has in this bill \$350 per person and the other 49 States have on the average in this bill \$12 per person.

This would certainly indicate that we should strike the Burns Creek project out of the bill, and I intend to offer an amendment for that purpose. We can give that project adequate hearings next year, and certainly the State of Idaho will not be treated unfairly because it will still have in this bill almost \$200 million of Federal money.

Mr. AUCHINCLOSS. Mr. Chairman, I yield 5 minutes to the gentleman from Iowa [Mr. SCHWENGEL].

(Mr. SCHWENGEL asked and was given permission to revise and extend his remarks.)

Mr. SCHWENGEL. Mr. Chairman, I first want to say that it has been a great experience to have the opportunity to serve on the Committee on Public Works with some very distinguished, devoted,

and dedicated Members of the Congress. I want to pay tribute as others have to the leadership on the majority and leadership on the minority side who have always sought to serve the public interest and to pay close attention to the desires and interests of the individual members of the committee and the Members of the Congress as a whole.

We had some assurance earlier from the majority side that if the controversial projects do not stay in this bill, and I hope they do not, that they will be considered early next year and hearings will be granted, as they should be, on this and many other projects that we should have considered this year much earlier. Now this is not complete assurance, I say to you, because this presumes that the present majority leader will be the majority leader in the next session of the Congress—and I do not believe he will because I believe the majority will shift to our side of the aisle. So in order to have complete assurance, I would like to address this question to the ranking Member on the minority side, the gentleman from New Jersey [Mr. AUCHINCLOSS]. Can you give this House assurance that if these projects are taken out that they will be considered when you take over as chairman of this committee in the next Congress?

Mr. AUCHINCLOSS. I appreciate the statement of the gentleman. I am very busy trying to get reelected myself to the Congress and if the Congress could only adjourn, I think I will be reelected. If I am reelected, and if I serve on this committee and we control the House, I assure the gentleman that we certainly will give these projects serious consideration.

Mr. SCHWENGEL. I thank the gentleman. Now we are assured that these projects will be considered in the next session of the Congress.

At the proper time I will offer an amendment to have the China Gardens project taken out of this bill. And for these reasons. H.R. 13273 would authorize the construction of the China Gardens project on the Snake River in Idaho at a cost of \$75 million. I say to this House that this is a controversial project. There have not been any public hearings on China Gardens. It is very controversial. Public witnesses were denied a hearing. There is an obligation on the part of the Congress to at least give the people in the area a chance to be heard as to whether they are for or against the project. The primary function of the China Gardens would be as a reregulating dam for the upstream High Mountain Sheep and it would be operated in coordination with High Mountain Sheep. The Pacific Northwest Power Co. has an application pending before the Federal Power Commission to construct High Mountain Sheep. The Pacific Northwest Power Co. has committed itself in testimony before the Senate Public Works Committee on September 6, 1962, to construct China Gardens, if the Federal Power Commission will make grants. It is adjacent to the High Mountain Sheep. Extensive hearings have been completed and the Federal Power Com-

mission decision is imminent and I think almost assured. China Gardens can be deferred with no adverse effect on the power supply in the Northwest region. The anticipated ratification by Canada of the Columbia River Treaty will make available large blocks of electric power. This power plus the power of the Hanford reactor and other hydropower projects which will be constructed completely obviates any need for the China Gardens project until 1970.

That is important data to remember. If that is so, we have plenty of time on this, and this is virtually a 100-percent power project. But two-tenths of 1 percent benefit go to other phases.

Mr. Chairman, this is a key project, because this not only involves \$75 million, but involves all the other projects which are part of that total system and probably would envision saving many millions of dollars more.

Mr. CRAMER. Mr. Chairman, will the gentleman yield?

Mr. SCHWENGEL. I yield to the gentleman from Florida.

Mr. CRAMER. The gentleman has just made a very important point right now. I have in my hand a 1957 estimate for the Columbia River and tributaries, all of which, Burns Creek, Knowles Dam, which is in the Senate bill, China Gardens, which is in this bill, Bruce Eddy, which is not in this bill, but is in the Senate bill—the total cost estimate of those projects is \$478 million, not including about a 20-percent increase in cost of construction since 1957. The total cost of this Columbia River Basin is \$1,169 million, not including the 20-percent increase. Including the 20-percent increase the estimate is \$1,400 million. That is why it is so important in considering the authorization of the Burns Creek and China Gardens project—the gentleman mentioned the High Mountain Sheep. That is in for \$198 million. It is essential to understand that this is underwriting this entire project without even public hearings on a \$1,500 million Columbia Basin improvement program. Can you, Mr. Chairman, imagine such irresponsibility on the part of Congress?

Mr. SCHWENGEL. It is terrible and almost unforgivable.

Permit me to say in closing that it makes no sense to consider this project now, and the possibility of saving millions of dollars is very good. If these can be justified when the hearings are held next year we have the assurance they can be taken care of at that time.

Mr. CRAMER. If this body knocks out Burns Creek and China Gardens we can get further information about them next year.

Mr. SCHWENGEL. That is true.

Mr. Chairman, because the philosophy of public power is at stake in this bill, I think the public interest is served by calling attention to an article entitled "Our Changing Economy," which follows:

OUR CHANGING ECONOMY—WHO PAYS FOR FEDERAL POWER?

(By Maurice H. Stans)

The investor-owned electric utilities in the United States last year paid \$1.312 billion



in Federal income taxes and \$1.104 billion in State and local taxes. Would you be willing to eliminate all these taxes in the future, and make the electric companies tax free?

Before you answer, think it over. A saving of \$2.416 billion in this way to the utilities would make it possible for them to cut all their electricity rates by about one-fourth.

This would be quite a saving for everyone. This is what happens in areas where Federal power systems operate, like TVA and others. They do have low electricity rates.

So far it sounds good.

But then comes the inevitable question. Who would make up the loss in revenues to the Federal and local governments?

The answer is that you and other property holders and income earners in the country would have to pay nearly \$2½ billion more in taxes—of one kind or another—for the governments to operate.

This circle illustrates a major distinction between Federal power and private power. Federal power is cheaper only because it shifts a burden of Government upkeep onto others.

To clarify this, let's look at the various costs involved in your electric bill:

Rather obviously such items as fuel, material, equipment and supplies presumably can be bought at similar prices by private enterprise or Government. Labor rates should be roughly comparable also, or else the labor unions should look into the matter. So this leaves one other major item:

Taxes currently are taking around 24 cents out of every \$1 billed to customers by private enterprise utilities. But Federal power enterprises pay no Federal taxes and out of each revenue dollar may pay little or nothing to local and State governments.

Sometimes there is a further difference. Utilities must borrow large sums of money to build their plants and distribution networks. The Federal Government can borrow a little cheaper than private companies. Local tax-exempt bodies can borrow still cheaper. And one Federal program, the Rural Electrification Administration, borrows from the Federal Treasury at 2 percent although the Government has to pay around 4 percent for the long-term funds it lends the REA. Again the taxpayer makes it up.

So if the price paid for Federal power is lower than that for private enterprise power, you can credit these two cost breaks for which every taxpayer is paying extra to make up the difference.

At the present time one-eighth of the installed generating capacity in the United States is Federal power. The pressures for more spreading of this deceptive "bargain" grow regularly.

REA asked for a record appropriation of nearly half a billion dollars this year (although 98 percent of the farmers now have central station electricity). A proposal to build a Federal power unit at an atomic site at Hanford, Wash., was barely defeated in Congress a short time ago. And now Government planners are advocating construction of a Federal national power grid, although private power companies have a nationwide system of interconnections and are building more each year.

The arguments of Federal power proponents don't hold water:

1. There is no need for Federal power where private companies are willing and able to do the job, and this is almost everywhere. The capacity of the industry has doubled about every 10 years.

2. Private utilities have the means and the finances. They already have invested \$46 billion in power facilities, and have been spending \$3.2 billion a year on new plant and equipment. They will have \$88 billion invested by 1970.

3. Federal power costs in actuality are not cheaper. Federal power rates are lower only

because of Federal subsidy through tax exemption and cheap money. Indeed, the added tax burden of existing federalized power currently exceeds the supposed savings from its "cheap power."

Nor can the argument be used that private utilities are gouging the public. Private utility returns are regulated rigidly by government public utilities commissions which ordinarily allow between 5 and 7 percent on invested capital—hardly a get-rich-quick return.

The real issue in Federal power, then, is not efficiency or economy of operation. The real issue is whether we want growing Government and ultimate socialization of the power industry. There is no need for any increase in Federal power if private industry does the job as it has and can. The trend ought to be the other way, if we believe in free enterprise and in tax equity. The Government ought to give private companies the opportunity to take over the Federal power operations upon a demonstration of their ability to do so.

Unless the trend of recent years is stopped, the cost of Federal power to us taxpayers can be expected to go up.

Matched against any standard, the investor-owned electric power industry has demonstrated an amazing record of competence, progress, and service. Rates today are about one-third of what they were 50 years ago. America has more power capacity than the next five countries in the world combined—three times that of the Soviet Union. The American home uses nearly eight times the electricity of the Russian home.

The electric industry is today one of the outstanding examples of successful free enterprise. Should we allow it to be slowly destroyed at the price of industrial socialism and higher taxes?

(Mrs. DWYER (at the request of Mr. AUCHINCLOSS) was given permission to extend her remarks at this point in the RECORD.)

Mrs. DWYER. Mr. Chairman, I think it is important to clarify the record with respect to the item concerning the modification of the Newark Bay-Hackensack and Passaic Rivers, N.J., project which would authorize Federal maintenance of the channels to Port Elizabeth. While I appreciate the concern of those who object to this and other projects that established procedures should be followed with regard to authorization of such projects, I believe a closer examination of this matter will reveal that in all essential respects the Port Elizabeth project meets the standards.

First of all, Mr. Chairman, this is a very modest project. There are no construction costs whatsoever involved for the Federal Government. Annual maintenance charges are estimated at \$230,500. The annual benefits have been forecast by the New York district and North Atlantic Division Engineers to be \$8,078,000. This is an incredibly high benefit-cost ratio. Even after adding non-Federal charges, which include the costs to local interests for the maintenance of ship berths alongside the branch channel, the total annual charges for this project amount to \$973,000, for a corresponding benefit-cost ratio of 8.3 to 1.

I can state unequivocally, Mr. Chairman, and I know that the district engineer and division engineer and Port of New York Authority all agree, that no

matter what formula is used for the calculation of benefits and costs, the ratio of benefits to cost will be overwhelmingly favorable.

Those who object to the Port Elizabeth channels project—and I believe it is worth emphasizing that the objections have been exclusively procedural and none have been made to the substance of the project—make a special point of the fact that the Governors of the affected States have not had an opportunity to comment on the project. I do not believe this objection is valid. The principal sponsor of the project is the Port of New York Authority. The Port of New York Authority is a public body, responsible to the States of New York and New Jersey, and charged with the responsibility of developing and operating shipping facilities in the vast New York-New Jersey port area. As a matter of practice, the Port of New York Authority could not propose a project of this type without the consent of the two States involved. This project was approved by the board of directors of the port authority and was made a part of the official minutes of that organization. Those minutes were subsequently submitted to the Governors of New York and New Jersey and were approved by both Governors.

I think it is fair to conclude therefore that the Governors of New York and New Jersey not only have had an opportunity to review this project but are wholeheartedly in favor of it. I maintain that the full requirement of the procedure referred to by those who object to the project has been met.

I should also like to point out, Mr. Chairman, that the channel maintenance which would be authorized by this provision of the bill is the same as maintenance previously authorized by the Congress for other shipping channels in the area and specifically for the channels leading to Port Newark. Port Newark is located immediately adjacent to Port Elizabeth, and the two projects, insofar as channel maintenance is concerned, are exactly similar.

There is nothing precedent setting about this project in any way. The channels involved are vital to the foreign and domestic seagoing commerce of the United States. They are an integral part of the biggest and most important international port in the world. The responsibility of the Federal Government is clear and indisputable.

One final point, Mr. Chairman. Those who object to this project contend that there is no particular reason for Congress to authorize Federal maintenance of the channels at this time. I would strongly disagree with this contention. A large part of the network of channels to Port Elizabeth have been constructed and are now in use. An increasing volume of shipping is currently moving through these channels. Cargo handling facilities are in existence and are under construction along these channels. A portion of the channels has been in use for as long as a year. The problem of maintenance, therefore, is a present one which should not be postponed.

In summary, Mr. Chairman, I share my colleagues' concern that procedural



requirements are important and should be insisted upon by Congress in the consideration of navigation and other public works projects. For the reasons I have outlined, I believe these requirements have been met in all significant respects. I hope the House will approve the inclusion of the Port Elizabeth channels item in the pending bill.

Mr. AUCHINCLOSS. Mr. Chairman, I now yield 5 minutes to the gentleman from Wyoming [Mr. HARRISON].

(Mr. HARRISON of Wyoming asked and was given permission to revise and extend his remarks.)

Mr. HARRISON of Wyoming. Mr. Chairman, I regret that the proponents of the Burns Creek project have seen fit to bring this project to the floor of the House today in the public works authorization bill. I also regret that they have seen fit to bring this project before us under a procedure which denied the opponents of the project any chance whatsoever to testify and to make their opposition and reason for such opposition known. It has been brought to the floor under a procedure of a closed hearing with one witness, and that one witness being from the Corps of Engineers. My own State of Wyoming desired to testify in opposition and made their opposition clear to the Corps of Engineers, but it is my understanding that the opposition of the State of Wyoming was not brought to the attention of the committee.

The procedure used on this particular piece of legislation not only is one which denies the rights of States and individuals to express their views on matters affecting them, but it also marks a new course in handling legislation before the House—a course which has taken a bill turned down by the House Interior and Insular Affairs Committee after extensive hearings, and brought it before the Public Works Committee under an entirely different theory that it was now a flood control project and not a reclamation project.

The Burns Creek project has been before the House Interior and Insular Affairs Committee, the committee on which I serve, on four different occasions. At no time was it ever claimed that this project was a flood control project and at no time were any benefits claimed for it under the heading of flood control. If there had been the proponents would surely have claimed them. The House Interior and Insular Affairs Committee turned this project down last February 7 because it was the opinion of the majority of the committee that this was not a true reclamation project, but was a 98-percent public power project with 2 percent being distributed between irrigation and wildlife and recreation benefits. The proponents have chosen on all these occasions to bring this bill before the House Interior and Insular Affairs Committee as a reclamation project. That was their choice. The House Interior and Insular Affairs Committee accepted the responsibility of hearings on this legislation in good faith. We gave it a fair and impartial hearing. We allowed all witnesses, whether for or against the project, to appear and testify or to put

their testimony in the record—quite different from the action of the Public Works Committee.

The action of the Corps of Engineers and the progress of this bill as a flood control measure has been veiled in secrecy from the beginning. Neither myself nor the State of Wyoming was notified by the Corps of Engineers that a hearing would be held on May 4 on this project. When I learned of the proposed hearing and asked the Corps of Engineers why we were not notified, I was told that only the congressional delegation of Idaho was notified. Both the State of Wyoming and myself made requests for a continuance on this hearing, asking that we be allowed to testify before the Corps of Engineers. This was refused. Following their May 4 meeting in which the corps approved this project, the State of Wyoming was requested to give their views on Burns Creek. This was prepared by the State of Wyoming and forwarded to the Corps of Engineers and was a protest against the building of this project and yet, I understand that the testimony of the State was not made available to the committee.

The Utah Power & Light Co. is building a steam generation plant at Kemmerer, Wyo., which will serve that whole southwest area with electric power. This plant is nearly completed and it will supply employment for a great many now unemployed miners and will help the economy not only of these individuals, but of the whole area. This plant will furnish taxes to the United States and to the State of Wyoming. It can and it will supply power to the areas in Wyoming which it is proposed that the Burns Creek project supply.

It is also interesting to note that the Corps of Engineers raised the figure from about \$46 to \$52 million for this project. The reason for this being given that they must add some flood control measures to it, which is a clear indication that the project itself had to have something added to it to give the Engineers jurisdiction. Then again, the Corps of Engineers proposes to turn over to the Bureau of Reclamation the building of this dam and its operation as a multiple-unit project under the same construction plans. If it is a true flood control project, and not a reclamation project as it was proposed before our committee, then why does the Corps of Engineers turn it back to the Bureau of Reclamation? There is no reason why this project cannot be put over until next year. It is controversial and it should receive a full hearing with everyone given a chance to testify either for or against it. I hope that the Members of this House will support the motion to strike this project from the bill so that proper procedures can be followed, and those of us who oppose this project, and the States that oppose this project have their rights protected.

(Mr. KEARNS (at the request of Mr. AUCHINCLOSS) was given permission to extend his remarks at this point in the Record.)

[Mr. KEARNS addressed the Committee. His remarks will appear hereafter in the Appendix.]

Mr. AUCHINCLOSS. Mr. Chairman, I yield such time as he may require to the gentleman from New York [Mr. ROBISON].

(Mr. ROBISON asked and was given permission to revise and extend his remarks.)

Mr. ROBISON. Mr. Chairman, I intend to vote against this bill—H.R. 13273—the omnibus rivers and harbors and flood control authorization bill, and I would like to take just a minute or two to tell my colleagues why.

Not only does H.R. 13273 contain—as the supplemental views of the minority Members point out—projects which ought to be deleted as either being opposed by the Corps of Engineers or because they have not been submitted to Congress in accordance with normal procedures, but it also contains several projects which we now know are controversial, and on which the opponent's thereof have been denied an opportunity to be heard. How many more are in this latter category. No one knows.

As a matter of fact, all of you will know as much about all of the projects which would be authorized by this bill—projects totalling over \$2 billion worth in estimated cost—as we on the committee know, merely by having reference to the committee report which sets forth a summary of each such project as prepared by the Army Engineers. Why is that? Because those brief summaries were all the information of any of these projects that we had, for—under the ground rules set up for us; rules with which I suspect the chairman of our subcommittee and my very good friend, the gentleman from Tennessee Mr. DAVIS did not agree—the only witnesses we were permitted to hear were witnesses from the Corps of Engineers and even their time was strictly limited.

Now, it may well be that even if we had held full, open hearings in the usual manner, we would still have reported to you a bill containing all or nearly all of the same projects as are set forth in H.R. 13273. I would have had no quarrel with any such result, and I would have supported such a bill for I fully appreciate the necessity of periodic legislation of this sort.

However, Mr. Chairman, I rather resent being used as a rubber stamp. I believe that my responsibility to the people I represent and to the people of this Nation goes well beyond that. Now, perhaps the great majority of the projects in this bill are truly noncontroversial and are fully justified, but, frankly, I do not know how we on the committee could so determine on the basis of the limited evidence we had before us. And I doubt that it mitigates our conduct at all for us to ease our conscience by saying that, after all, this is only an authorization bill and the Appropriations Committees will give each of these projects a more careful look before anything else is done thereon.

That is true, but the hardworking and overworked—if I may say so—Appropriations Committees also have a right to assume that we, on our part, have given the justification for these millions of dollars worth of new public works projects our full and careful consideration.



I am just as tired and ready to go home as any of you—maybe more so—but my conscience simply will not permit me to believe that our committee—a committee of which I have heretofore been proud to be a member—has lived up to its full responsibility in this instance. We have, I think, had ample time in which to do so, but it is not my right to speculate on why we did not.

However, it is my right—in protest—to vote against this bill, which I fully intend to do and I invite any of my colleagues who feel similarly inclined to join me in doing so.

Now, Mr. Chairman, if that means no omnibus bill this year, so be it. There is not much of “this year” left anyway, and if that is the case then perhaps we will come back in January, prepared and determined to do a proper job.

(Mr. GRAY (at the request of Mr. DAVIS of Tennessee) was given permission to extend his remarks at this point in the RECORD.)

Mr. GRAY. Mr. Chairman, I rise in support of H.R. 3273, a bill authorizing the construction, repair, and preservation of certain public works projects on rivers and harbors for navigation, flood control, and for other purposes. It has been my pleasure to serve on the important Subcommittees on Rivers and Harbors and Flood Control of the Committee on Public Works for 8 years and although time has been running against us in the closing days of this session, I can truthfully say that I have never witnessed a greater display of teamwork than has been shown by our chairman, our subcommittee chairmen, the members of the committee, and the staff. I want to personally commend my friend, the distinguished gentleman from Tennessee, Mr. CLIFFORD DAVIS, and my friend the distinguished gentleman from Minnesota [Mr. BLATNIK], chairmen of the Flood Control and Rivers and Harbors Subcommittees, respectively. They have done a magnificent job on this bill. I also want to publicly commend our chief clerk Mrs. Margaret Beiter, our consultant engineer, Mr. Joe Brennan, and Richard Sullivan our counsel. They have truly worked like Trojans and along with other members of the Public Works Committee staff have done an outstanding job.

Mr. Chairman, this is an all-American bill. This is not a so-called “pork barrel” bill as has been stated on the floor previously.

This is a bill to improve commerce and navigation, supply much needed protection for flood control, provide recreation, industrial development, and meet other essential economic ingredients needed for a bigger and better America. America will be stronger and most certainly a better place in which to live because of the tremendous benefits that will ultimately be derived from this legislation.

Mr. Chairman, I am particularly grateful to the committee for allowing several projects in Illinois be included in this legislation. Coming from a district that is bounded on both sides by the two great rivers, the Ohio and Mississippi, we have far-reaching problems on the tributaries of these rivers. We have many God-

given natural resources in the area and I am confident that the projects included in this bill will help our area gain full employment, in the not too distant future. We have been spending untold millions in the past for relief handouts and at present have as many as 25 percent of the employable force unemployed in some counties of my district. Serious flood damages annually, of course, only aggravate a bad situation. The projects I am about to list that are included in this bill for my district will help control floods, improve economic benefits, and provide much needed facilities, that have been lacking in the past. There is an authorization in this legislation for the Kaskaskia River navigation project and although the cost is \$58.2 million to the Federal Government we already have promised over \$300 million in private capital investment.

Mr. Chairman, it makes sense when we can invest \$58 million in Federal funds and receive benefits many times over coming back to the Federal Government in the form of taxes and repayments. We also have in this bill an authorization for \$35.5 million for the Rend Lake Reservoir in southern Illinois. I could speak all day on the need for Rend Lake but will suffice to say that the project will alleviate floods in the Big Muddy Basin, provide a much needed water supply for industry, give us a tremendous recreation area that can be enjoyed by all Americans and other multipurpose benefits. We also have included in the legislation an amendment deleting the amount of local cash contribution required for the Saline River, Ill., project authorized by Congress in 1958. Included in the Flood Control section of the bill is a project to alleviate floods along the Mississippi River on Kaskaskia Island between Ste. Genevieve and St. Marys, Mo. This flood control work on the Illinois side of the Mississippi River in Randolph County, Ill., is in the amount of \$2,500,000. Included in the bill is a vitally needed flood control project in the Harrisonville and Ivy Landing Drainage and Levee No. 2, Illinois, in the amount of \$1,112,000. Also a project in the Columbia Drainage and Levee District No. 3, Illinois, flood control works in the amount of \$986,000 and, Mr. Chairman, a project in the Prairie du Pont Levee and Sanitary District, Ill., in flood control work in the amount of \$921,000.

Mr. Chairman, the above projects are vitally needed in the basins surrounded by the two great rivers, the Ohio and the Mississippi, and I again want to thank the Committee and my colleagues for supporting this much needed legislation containing these valuable projects. Thank you very much.

(Mr. DORN (at the request of Mr. DAVIS of Tennessee) was given permission to extend his remarks at this point in the RECORD.)

[Mr. DORN addressed the Committee. His remarks will appear hereafter in the Appendix.]

Mr. DAVIS of Tennessee. Mr. Chairman, I yield such time as he may con-

sume to the gentleman from Georgia [Mr. FLYNT].

(Mr. FLYNT asked and was given permission to revise and extend his remarks.)

Mr. FLYNT. Mr. Chairman, I support this bill.

Mr. Chairman, I rise in support of H.R. 13273, a bill authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

This is legislation which usually every 2 years is brought before the Congress for the purpose of authorizing certain public works projects in the nature of construction, repair, and preservation of projects on rivers and harbors for navigation, flood control, and other purposes in the interest of a strong and vital United States.

The projects which are authorized by this legislation are in the nature of capital investments which will be of benefit to our Nation and its citizens for many years ahead. Most of these projects will be self-liquidating, and over the period of their lives will return to the Treasury of the United States more than the capital outlay, including cost of construction, interest charges, and maintenance of operation.

I am particularly pleased that this bill contains a provision for substantial river development on the Chattahoochee River in the form of a multipurpose dam and reservoir in the vicinity of West Point, Troup County, and Franklin, Heard County, Ga., and adjacent territory in Alabama.

The lower reach of the Chattahoochee River forms a portion of the boundary between Georgia and Alabama. Its headwaters are in the mountains of north Georgia. It drains the north central portion of Georgia as well as the southwest portion of Georgia and the southeast portion of Alabama. The drainage basin of the Chattahoochee River is 440 miles long and averages 30 miles in width. The confluence of the Chattahoochee and Flint Rivers join to form the Apalachicola River.

The authority for the inclusion of this portion of the bill is contained in resolutions by the Committee on Public Works of the House of Representatives adopted July 29, 1955, in the 84th Congress and July 31, 1957, in the 85th Congress.

During recent years, in fact twice during one 12 month period, flood damage in what is referred to as the middle reach of the Chattahoochee River has been substantial. Flood damage at and below West Point, Ga., has been estimated to average \$600,000 annually, and there was an estimated \$2 million damage in a 2-year time frame including 1961 and 1962.

There is also an increasing demand for power in the area to be served by this project.

Recommended plan of improvement includes construction of West Point Dam and Reservoir for hydroelectric power, flood control, navigation, and recreation. The dam would be located at river mile 201.4 and would form a reservoir of 553,000 acre-feet capacity; 282,000 acre-feet



would be for power purposes except for flood control storage use of a maximum of 204,000 acre-feet from December through April. Storage of 158,000 acre-feet would also be usable for flood control above the power pool.

The benefit-cost ratio is 1.3. The annual charges, including interest and amortization, maintenance, operation, replacement, and taxes foregone, is estimated at \$2,671,000. The annual benefits, including flood control, power, recreation, fish and wildlife, and navigation, amount to \$3,524,000.

The reports from the States of Georgia and Alabama were favorable to the authorization of this project. The affected Federal agencies, including the Departments of Interior, Agriculture, Commerce and Health, Education, and Welfare, the Federal Power Commission and the Public Health Service submitted written statements stating that there was no objection to the authorization of the project.

The Bureau of the Budget advises that there is no objection to the submission of the report to the Congress.

It is my belief that this project will be of great benefit and value to the economy of the area which we refer to as west central Georgia. It will also be of value to our adjoining State of Alabama.

Mr. Chairman, I would like to express my appreciation to the Committee on Public Works, especially to the subcommittee on Flood Control, to both U.S. Senators from Georgia, Hon. RICHARD B. RUSSELL and Hon. HERMAN E. TALMADGE, to the U.S. Corps of Engineers, and to all others who have participated and cooperated in making possible the authorization for the West Point dam and reservoir. To each of those Members of Congress, engineer officials, and private citizens who have worked diligently for this cause, I express my gratitude and appreciation.

Mr. DAVIS of Tennessee. Mr. Chairman, we have no further requests for time.

Mr. GROSS. Mr. Chairman, I make the point of order that a quorum is not present.

The CHAIRMAN. The Chair will count. [After counting.] One hundred and five Members are present, a quorum.

The Clerk will read.

The Clerk read as follows:

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

#### TITLE I—RIVERS AND HARBORS

SEC. 101. That the following works of improvement of rivers and harbors and other waterways for navigation, flood control, and other purposes are hereby adopted and authorized to be prosecuted under the direction of the Secretary of the Army and supervision of the Chief of Engineers, in accordance with the plans and subject to the conditions recommended by the Chief of Engineers in the respective reports hereinafter designated: *Provided*, That the provisions of section 1 of the River and Harbor Act approved March 2, 1945 (Public Law Numbered 14, Seventy-ninth Congress, first session), shall govern with respect to projects authorized in this title; and the procedures therein set forth with respect to plans, proposals, or reports for works of improvement for navigation or

flood control and for irrigation and purposes incidental thereto, shall apply as if herein set forth in full:

#### Navigation

Narraguagus River, Maine: House Document Numbered 530, Eighty-seventh Congress, at an estimated cost of \$500,000;

Carvers Harbor, Vinalhaven, Maine: Senate Document Numbered 118, Eighty-seventh Congress, at an estimated cost of \$205,000;

Searsport Harbor, Maine: House Document Numbered 500, Eighty-seventh Congress, at an estimated cost of \$700,000;

Portland Harbor, Maine: House Document Numbered 216, Eighty-seventh Congress, at an estimated cost of \$8,340,000;

Kennebunk River, Maine: House Document Numbered 459, Eighty-seventh Congress, at an estimated cost of \$270,000;

Portsmouth Harbor and Piscataqua River, Maine and New Hampshire: House Document Numbered 482, Eighty-seventh Congress, at an estimated cost of \$7,500,000;

Gloucester Harbor, Massachusetts: House Document Numbered 341, Eighty-seventh Congress, at an estimated cost of \$1,100,000;

Marblehead Harbor, Massachusetts: House Document Numbered 516, Eighty-seventh Congress, at an estimated cost of \$1,752,000;

Chelsea Harbor, Massachusetts: House Document Numbered 350, Eighty-seventh Congress, at an estimated cost of \$2,843,000;

Dorchester Bay and Neponset River, Massachusetts: Senate Document Numbered 126, Eighty-seventh Congress, at an estimated cost of \$7,050,000;

Plymouth Harbor, Massachusetts: Senate Document Numbered 124, Eighty-seventh Congress, at an estimated cost of \$1,200,000;

Pawtuxet Cove, Rhode Island: House Document Numbered 236, Eighty-seventh Congress, at an estimated cost of \$210,000;

Little Neck Bay, New York: House Document Numbered 510, Eighty-seventh Congress, at an estimated cost of \$2,185,000;

Flushing Bay and Creek, New York: House Document Numbered 551, Eighty-seventh Congress, at an estimated cost of \$1,695,000;

Buttermilk Channel, New York: House Document Numbered 483, Eighty-seventh Congress, at an estimated cost of \$2,226,000;

Newark Bay, Hackensack and Passaic Rivers, New Jersey (channels to Port Elizabeth): Modification of the existing navigation project authorized by the River and Harbor Act of 1954 (Public Law 780, Eighty-third Congress). House Document Numbered 252, is hereby authorized substantially in accordance with the plans being prepared by the Chief of Engineers.

Raritan River, New Jersey: House Document Numbered 455, Eighty-sixth Congress, maintenance;

Lynnhaven Inlet, Bay, and connecting waters, Virginia: House Document Numbered —, Eighty-seventh Congress, at an estimated cost of \$1,068,000: *Provided*, That

nothing in this Act shall be construed as authorizing reimbursement to local interests for the Long Creek-Broad Bay Canal Bridge;

Rollinson Channel and channel from Hatteras Inlet to Hatteras, North Carolina: House Document Numbered 457, Eighty-seventh Congress, at an estimated cost of \$652,000;

Wilmington Harbor, North Carolina: Senate Document Numbered 114, Eighty-seventh Congress, at an estimated cost of \$6,370,000;

Savannah Harbor, Georgia: Senate Document Numbered 115, Eighty-seventh Congress, at an estimated cost of \$605,000;

Key West Harbor, Florida: Senate Document Numbered 106, Eighty-seventh Congress, at an estimated cost of \$820,000;

Tampa Harbor, Port Sutton and Ybor Channels, Florida: House Document Numbered 529, Eighty-seventh Congress, at an estimated cost of \$997,000;

Walter F. George lock and dam, Alabama: Senate Document Numbered 109, Eighty-

seventh Congress, at an estimated cost of \$500,000;

Pensacola Harbor, Florida: House Document Numbered 528, Eighty-seventh Congress, at an estimated cost of \$424,000;

Holt lock and dam, Alabama: The Secretary of the Army is hereby authorized and directed to cause an immediate study to be made under the direction of the Chief of Engineers with a view to providing hydroelectric power generating facilities in said dam, and such installation of necessary power facilities is hereby authorized as determined to be justified by the Secretary of the Army, unless within the first period of sixty calendar days of continuous session of the Congress after the date on which the report is submitted to it such report is disapproved by the Congress.

Pascagoula Harbor, Mississippi: House Document Numbered 560, Eighty-seventh Congress, at an estimated cost of \$4,870,000;

Mississippi River, Baton Rouge to Gulf of Mexico, Louisiana: Senate Document Numbered 36, Eighty-seventh Congress, at an estimated cost of \$357,000;

Gulf Intracoastal Waterway, Louisiana and Texas: House Document Numbered 556, Eighty-seventh Congress, at an estimated cost of \$25,540,000;

Calcasieu River Salt Water Barrier, Louisiana: House Document Numbered 582, Eighty-seventh Congress, at an estimated cost of \$3,310,000;

Mississippi River at Clarksville, Missouri: House Document Numbered 552, Eighty-seventh Congress, at an estimated cost of \$103,300;

Sandy Slough, Lincoln County, Missouri: House Document Numbered 419, Eighty-seventh Congress, at an estimated cost of \$195,000;

Sabine-Neches Waterway, Texas: House Document Numbered 553, Eighty-seventh Congress, at an estimated cost of \$20,830,000;

Trinity River, Wallisville Reservoir, Texas: House Document Numbered 215, Eighty-seventh Congress, at an estimated cost of \$9,162,000;

Gulf Intracoastal Waterway, channel to Palacios, Texas: House Document Numbered 504, Eighty-seventh Congress, at an estimated cost of \$818,000;

Gulf Intracoastal Waterway, channel to Victoria, Texas: House Document Numbered 288, Eighty-seventh Congress, at an estimated cost of \$1,590,000;

Illinois Waterway, Illinois and Indiana: House Document Numbered 31, Eighty-sixth Congress, at an estimated cost of \$114,652,000;

Kaskaskia River, Illinois: Senate Document Numbered 44, Eighty-seventh Congress, at an estimated cost of \$58,200,000;

Mississippi River between Missouri River and Minneapolis, Minnesota: House Document Numbered 513, Eighty-seventh Congress, at an estimated cost of \$1,205,000;

Ontonagon Harbor, Michigan: House Document Numbered 287, Eighty-seventh Congress, at an estimated cost of \$4,741,000;

Muskegon Harbor, Michigan: House Document Numbered 474, Eighty-seventh Congress, at an estimated cost of \$609,000;

Leland Harbor, Michigan: House Document Numbered 413, Eighty-seventh Congress, at an estimated cost of \$485,000;

Little Bay De Noc, Gladstone Harbor and Kipling, Michigan: House Document Numbered 480, Eighty-seventh Congress, at an estimated cost of \$350,000;

Green Bay Harbor, Wisconsin: House Document Numbered 470, Eighty-seventh Congress, at an estimated cost of \$4,270,000;

Kenosha Harbor, Wisconsin: House Document Numbered 496, Eighty-seventh Congress, at an estimated cost of \$673,000;

Manitowoc Harbor, Wisconsin: House Document Numbered 479, Eighty-seventh Congress, at an estimated cost of \$719,000;



Milwaukee Harbor, Wisconsin: House Document Numbered 134, Eighty-seventh Congress, at an estimated cost of \$4,029,000;  
 Calumet Harbor and River, Illinois and Indiana: House Document Numbered —, Eighty-seventh Congress, at an estimated cost of \$11,464,000;

Chicago Harbor, Illinois: House Document Numbered 485, Eighty-seventh Congress, at an estimated cost of \$1,505,000;

New Buffalo Harbor, Michigan: House Document Numbered 481, Eighty-seventh Congress, at an estimated cost of \$667,000;

Caseville Harbor, Michigan: House Document Numbered 64, Eighty-seventh Congress, at an estimated cost of \$327,000;

Saginaw River, Michigan: House Document Numbered 544, Eighty-seventh Congress, at an estimated cost of \$4,784,000;

Rouge River, Michigan: House Document Numbered 509, Eighty-seventh Congress, at an estimated cost of \$257,000;

Huron Harbor, Ohio: House Document Numbered 165, Eighty-seventh Congress, at an estimated cost of \$8,557,000;

Cleveland Harbor, Ohio: House Document Numbered 527, Eighty-seventh Congress, at an estimated cost of \$888,000;

Conneaut Harbor, Ohio: House Document Numbered 415, Eighty-seventh Congress, at an estimated cost of \$6,179,000;

Erie Harbor, Pennsylvania: House Document Numbered 340, Eighty-seventh Congress, at an estimated cost of \$671,000;

Buffalo Harbor, New York: House Document Numbered 451, Eighty-seventh Congress, at an estimated cost of \$2,797,000;

Great Sodus Bay Harbor, New York: House Document Numbered 138, Eighty-seventh Congress, at an estimated cost of \$765,000;

Oswego Harbor, New York: House Document Numbered 471, Eighty-seventh Congress, at an estimated cost of \$1,180,000;

Dana Harbor, California: House Document Numbered 532, Eighty-seventh Congress, at an estimated cost of \$3,730,000;

Santa Barbara Harbor, California: House Document Numbered 518, Eighty-seventh Congress, at an estimated cost of \$3,000,000;

Oakland Harbor, California, Fruitvale Avenue Bridge: Senate Document Numbered 75, Eighty-seventh Congress, at an estimated cost of \$1,750,000;

Oakland Harbor, California: House Document Numbered 353, Eighty-seventh Congress, at an estimated cost of \$6,775,000;

Noyo River and Harbor, California: Senate Document Numbered 121, Eighty-seventh Congress, at an estimated cost of \$13,231,000;

Columbia and Lower Willamette Rivers, Oregon and Washington: House Document Numbered 203, Eighty-seventh Congress, at an estimated cost of \$493,000;

Columbia and Lower Willamette Rivers below Vancouver, Washington, and Portland, Oregon: House Document Numbered 452, Eighty-seventh Congress, at an estimated cost of \$20,100,000;

Tacoma Harbor, Port Industrial and Hylebos Waterways, Washington: Senate Document Numbered 104, Eighty-seventh Congress, at an estimated cost of \$2,460,000;

Kingston Harbor, Washington: House Document Numbered 417, Eighty-seventh Congress, at an estimated cost of \$428,000;

Swinomish Channel, Washington: House Document Numbered 499, Eighty-seventh Congress, at an estimated cost of \$887,000;

Kaunakakai Harbor, Molokai, Hawaii: House Document Numbered 484, Eighty-seventh Congress, at an estimated cost of \$7,919,000;

#### *Beach erosion*

State of New Hampshire: House Document Numbered 416, Eighty-seventh Congress, at an estimated cost of \$88,000;

Fire Island Inlet and shore westerly to Jones Inlet, Long Island, New York: Modification of the existing beach erosion control project authorized by the River and Harbor Act of 1958 (Public Law 500, Eighty-fifth

Congress), House Document Numbered 411, Eighty-fifth Congress, is hereby authorized substantially in accordance with the plans, which will include a sand bypassing system at Fire Island Inlet, being prepared by the Chief of Engineers;

Virginia Beach, Virginia: House Document Numbered 382, Eighty-seventh Congress, periodic nourishment;

Fort Macon, Atlantic Beach and vicinity, North Carolina: House Document Numbered 555, Eighty-seventh Congress, at an estimated cost of \$194,000;

Virginia Key and Key Biscayne, Florida: House Document Numbered 561, Eighty-seventh Congress, at an estimated cost of \$220,000;

Lake Erie shoreline from the Michigan-Ohio State line to Marblehead, Ohio: House Document Numbered 63, Eighty-seventh Congress, at an estimated cost of \$658,500;

Sheffield Lake Community Park, Sheffield Lake Village, Ohio: House Document Numbered 414, Eighty-seventh Congress, at an estimated cost of \$100,300;

Ventura-Pierpoint Area, California: House Document Numbered 458, Eighty-seventh Congress, at an estimated cost of \$515,000.

SEC. 102. The Secretary of the Army is authorized to convey 17.94 acres of land located at old lock and dam numbered 7, Ohio River, to the city of Midland, Pennsylvania, after November 1, 1962, for public park and recreation purposes, without monetary consideration but subject to reversion to the United States if not utilized for public park and recreation purposes and further subject to such flowage rights as may be necessary in the operation of the New Cumberland lock and dam, Ohio River.

SEC. 103. That the Secretary of the Army is hereby authorized to reimburse local interests for such work done by them on the beach erosion projects authorized in section 101, and in other sections of this Act, subsequent to the initiation of the cooperative studies which form the basis for the projects: *Provided*, That the work which may have been done on these projects is approved by the Chief of Engineers as being in accordance with the projects herein adopted: *Provided further*, That such reimbursement shall be subject to appropriations applicable thereto or funds available therefor and shall not take precedence over other pending projects of higher priority for improvements.

SEC. 104. The Secretary of the Army is hereby authorized and directed to cause surveys to be made at the following named localities and subject to all applicable provisions of section 10 of the River and Harbor Act of 1950:

A channel between Point Shirley and Deer Island, Massachusetts, at approximately the same location as the former channel commonly known as Shirley Gut.

Kings Bay Channel, Georgia.

Auglaize River in Wapakoneta, Auglaize County, Ohio.

SEC. 105. Title I of this Act may be cited as the "River and Harbor Act of 1962".

#### TITLE II—FLOOD CONTROL

SEC. 201. That section 3 of the Act approved June 22, 1936 (Public Law Numbered 738, Seventy-fourth Congress), as amended by section 2 of the Act approved June 28, 1938 (Public Law Numbered 761, Seventy-fifth Congress), shall apply to all works authorized in this title except that for any channel improvement or channel rectification project, provisions (a), (b), and (c) of section 3 of said Act of June 22, 1936, shall apply thereto, and except as otherwise provided by law: *Provided*, That the authorization for any flood control project herein adopted requiring local cooperation shall expire five years from the date on which local interests are notified in writing by the Department of the Army of the requirements of local cooperation, unless said interests shall within said time furnish assurances satis-

factory to the Secretary of the Army that the required cooperation will be furnished.

SEC. 202. The provisions of section 1 of the Act of December 22, 1944 (Public Law Numbered 584, Seventy-eighth Congress, second session), shall govern with respect to projects authorized in this Act, and the procedures therein set forth with respect to plans, proposals, or reports for works of improvement for navigation or flood control and for irrigation and purposes incidental thereto shall apply as if herein set forth in full.

SEC. 203. The following works of improvement for the benefit of navigation and the control of destructive floodwaters and other purposes are hereby adopted and authorized to be prosecuted under the direction of the Secretary of the Army and the supervision of the Chief of Engineers in accordance with the plans in the respective reports hereinafter designated and subject to the conditions set forth therein: *Provided*, That the necessary plans, specifications, and preliminary work may be prosecuted on any project authorized in this title with funds from appropriations heretofore or hereafter made for flood control so as to be ready for rapid inauguration of a construction program: *Provided further*, That the projects authorized herein shall be initiated as expeditiously and prosecuted as vigorously as may be consistent with budgetary requirements: *And provided further*, That penstocks and other similar facilities adapted to possible future use in the development of hydroelectric power shall be installed in any dam authorized in this Act for construction by the Department of the Army when approved by the Secretary of the Army on the recommendation of the Chief of Engineers and the Federal Power Commission.

#### *New England-Atlantic coastal area*

The project for navigation and hurricane-flood protection at Wareham-Marion, Massachusetts, is hereby authorized substantially in accordance with the recommendation of the Chief of Engineers in House Document Numbered 548, Eighty-seventh Congress, at an estimated cost of \$3,811,500.

The project for navigation and hurricane flood protection at Point Judith, Rhode Island, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 521, Eighty-seventh Congress, at an estimated cost of \$2,414,000.

The project for navigation and hurricane-flood control protection at Narragansett Pier, Rhode Island, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 195, Eighty-seventh Congress, at an estimated cost of \$1,152,000.

#### *Long Island Sound area*

The project for hurricane-flood control protection at New London, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 478, Eighty-seventh Congress, at an estimated cost of \$2,401,000.

The project for hurricane-flood protection at Westport, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 412, Eighty-seventh Congress, at an estimated cost of \$217,000.

The project for hurricane-flood protection at Mystic, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 411, Eighty-seventh Congress, at an estimated cost of \$1,490,000.

#### *Housatonic River Basin*

The project for flood protection on the Naugatuck River at Ansonia-Derby, Connecticut, is hereby authorized substantially



in accordance with the recommendations of the Chief of Engineers in House Document Numbered 437, Eighty-seventh Congress at an estimated cost of \$5,620,000.

#### *Hudson River Basin*

The project for flood protection on Rondout Creek and Wallkill River and their tributaries, New York and New Jersey, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 113, Eighty-seventh Congress, at an estimated cost of \$5,111,000.

#### *New Jersey—Atlantic coastal area*

The project for hurricane-flood protection and beach erosion control on Raritan Bay and Sandy Hook Bay, New Jersey, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 464, Eighty-seventh Congress, at an estimated cost of \$3,097,000.

#### *Susquehanna River Basin*

The project for the Juniata River and tributaries, Pennsylvania, is hereby authorized in accordance with the recommendations of the Chief of Engineers in House Document Numbered 565, Eighty-seventh Congress, but without the power features, at an estimated cost of \$32,150,000: *Provided*, That if the Chief of Engineers deems it desirable he may submit a reexamination report on the power generating to the Congress for its consideration.

#### *Delaware River basin*

The project for the comprehensive development of the Delaware River Basin, New York, New Jersey, Pennsylvania, and Delaware, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers, in House Document Numbered 522, Eighty-seventh Congress, at an estimated cost of \$224,000,000.

#### *Potomac River basin*

The project for the North Branch of the Potomac River, Maryland and West Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers, in House Document Numbered 469, Eighty-seventh Congress, at an estimated cost of \$50,965,000.

#### *Middle Atlantic coastal area*

The project for hurricane-flood protection at Norfolk, Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 354, Eighty-seventh Congress, at an estimated cost of \$1,537,000.

The project for hurricane-flood protection and beach erosion control at Carolina Beach and vicinity, North Carolina, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 418, Eighty-seventh Congress, at an estimated cost of \$739,000.

#### *Apalachicola River basin, Georgia*

The project for the West Point Reservoir, Chattahoochee River, Georgia, is hereby authorized substantially in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers in House Document Numbered 570, Eighty-seventh Congress, at an estimated cost of \$52,900,000.

#### *Central and southern Florida*

The comprehensive plan for flood control and other purposes in central and southern Florida, approved in the Act of June 30, 1948, and subsequent Acts of Congress is hereby modified to include the following items:

The project for south Dade County, Florida, is hereby authorized substantially in accordance with the recommendations of the

Secretary of the Army and the Chief of Engineers in Senate Document Numbered 138, Eighty-seventh Congress, at an estimated cost of \$13,388,000;

The project for flood protection in the Cutler Drain Area, Florida, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 123, Eighty-seventh Congress, at an estimated cost of \$2,063,000.

#### *Green Swamp region, Florida*

The project for the four river basins, Florida, namely the Hillsborough, Oklawaha, Withlacoochee, and Peace Rivers, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 585, Eighty-seventh Congress, at an estimated cost of \$57,760,000.

#### *Pascagoula River Basin*

The project for flood protection on the Chunky Creek, Chickasawhay and Pascagoula Rivers, Mississippi, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 549, Eighty-seventh Congress, at an estimated cost of \$6,740,000.

#### *Lower Mississippi River Basin*

The project for flood control and improvement of the lower Mississippi River, adopted by the Act of May 15, 1928, as amended, is hereby modified and expanded to include construction of certain improvements in Gin and Muddy Bayous, Yazoo River Basin, Mississippi, substantially in accordance with plans on file in the Office, Chief of Engineers, at an estimated cost of \$150,000.

The project for hurricane-flood protection on the Mississippi River Delta at and below New Orleans, Louisiana, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 550, Eighty-seventh Congress, at an estimated cost of \$7,502,000.

The project for flood protection on Red River in Natchitoches and Red River Parishes, Louisiana, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 476, Eighty-seventh Congress, at an estimated cost of \$1,293,000.

The lower auxiliary channel, Yazoo River Basin, Mississippi, a unit in the Mississippi River and tributaries project, shall hereafter be known and designated as the Will M. Whittington Auxiliary Channel in honor of the late Member of the House of Representatives from the Third District of Mississippi, and former chairman of the House Public Works Committee. The Secretary of the Army, acting through the Chief of Engineers, United States Army, is hereby authorized and directed to erect appropriate markers along the auxiliary channel designating the project "The Will M. Whittington Auxiliary Channel". Any law, regulation, document, or record of the United States in which such project is designated or referred to under the name of lower auxiliary channel, Yazoo River Basin, Mississippi, shall be held and considered to refer to such project by the name of "Will M. Whittington Auxiliary Channel".

#### *Buffalo Bayou*

The project for flood protection on Vince and Little Vince Bayous, Texas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 441, Eighty-seventh Congress, at an estimated cost of \$2,224,000.

#### *Gulf of Mexico*

The project for hurricane-flood protection at Port Arthur and vicinity, Texas, is hereby

authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 585, Eighty-seventh Congress, at an estimated cost of \$23,380,000.

The project for hurricane-flood protection at Freeport and vicinity, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 495, Eighty-seventh Congress, at an estimated cost of \$3,780,000.

#### *Trinity River Basin*

The project for flood protection on the East Fork of the Trinity River, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 554, Eighty-seventh Congress, at an estimated cost of \$23,760,000.

The project for extension of the Fort Worth Floodway, Texas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 454, Eighty-seventh Congress, at an estimated cost of \$5,148,000.

#### *Brazos River Basin*

The comprehensive plan for the Brazos River Basin, authorized by the Act of September 3, 1954, as amended by subsequent Acts of Congress, is hereby further modified to include the following item, and the monetary authorization for said comprehensive plan is hereby increased accordingly.

The project for the San Gabriel River, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered —, Eighty-seventh Congress, at an estimated cost of \$20,250,000.

The project for flood protection on the Clear Fork of the Brazos River at and in the vicinity of Abilene, Texas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 506, Eighty-seventh Congress, at an estimated cost of \$31,200,000.

#### *Tularosa Basin*

The project for flood protection at Alamogordo, New Mexico, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 473, Eighty-seventh Congress, at an estimated cost of \$2,040,000.

#### *Rio Grande Basin*

The project for flood protection at Las Cruces, New Mexico, is hereby authorized substantially as recommended by the Chief of Engineers in Senate Document Numbered 117, Eighty-seventh Congress, at an estimated cost of \$3,350,000.

#### *Arkansas River Basin*

The Dardanelle lock and dam, Arkansas River, Arkansas, is hereby modified to provide for construction of a sewage outfall for the city of Russellville, Arkansas, substantially in accordance with plans of said city, approved by the Chief of Engineers, at an estimated cost of \$1,400,000.

The project for flood protection on Cow Creek, Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 531, Eighty-seventh Congress, at an estimated cost of \$1,560,000.

The project for flood protection on the Arkansas River at Dodge City, Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers, in House Document Numbered 498, Eighty-seventh Congress, at an estimated cost of \$2,133,000.

The project for improvement of the Verdigris River and tributaries, Oklahoma and Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document



Numbered 563, Eighty-seventh Congress, at an estimated cost of \$62,400,000.

The project for the Kaw Reservoir, Arkansas River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 143, Eighty-seventh Congress, at an estimated cost of \$83,230,000.

#### *White River Basin*

The project for flood protection on Village Creek, White River, and Mayberry Levee Districts, Arkansas, is hereby modified to provide for construction of a pumping plant, substantially as recommended by the Chief of Engineers in House Document Numbered 577, Eighty-seventh Congress, at an estimated cost of \$1,018,000.

The flood protection project for Village Creek, Jackson and Lawrence Counties, Arkansas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 352, Eighty-seventh Congress, at an estimated cost of \$1,968,000.

#### *Red River Basin*

The project for Lake Kemp, Wichita River, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 144, Eighty-seventh Congress, at an estimated cost of \$6,410,000.

The project providing for the construction of two experimental water quality study projects in the Arkansas-Red River Basins, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 105, Eighty-seventh Congress, at an estimated cost of \$300,000.

The modification of the Broken Bow Reservoir, Mountain Fork River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 137, Eighty-seventh Congress, at an estimated cost of \$23,800,000.

The project for the Clayton and Tusahoma Reservoirs, Kiamichi River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 145, Eighty-seventh Congress, at an estimated cost of \$29,748,000.

#### *Missouri River Basin*

The comprehensive plan for the Missouri River Basin, approved in the Act of June 28, 1938, as amended by subsequent Acts of Congress, is hereby further modified to include the following projects, and the monetary authorization for said general comprehensive plan is increased accordingly.

(a) The Kaysinger Bluff Reservoir, Osage River, Missouri, is hereby modified substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered —, Eighty-seventh Congress, at an estimated additional cost of \$43,245,000: *Provided*, That nothing in this Act shall be construed as authorizing the acquisition of additional lands for the establishment of a national wildlife refuge at the reservoir.

(b) The project for the Kansas River, Kansas, Nebraska, and Colorado, is hereby authorized substantially in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers in Senate Document Numbered 122, Eighty-seventh Congress, at an estimated cost of \$88,070,000: *Provided*, That the authorization for the Woodbine Reservoir on Lyon Creek is deferred at this time, subject to submission of a new feasibility report by the Chief of Engineers to the Eighty-eighth Congress, which shall take into account the water and related land resource development plans of the Soil Conservation Service, the Kansas Water Resources Board, and Lyon

Creek Watershed Joint District Numbered 41, and preparation of said report is hereby authorized.

The project for flood protection on Papillion Creek and tributaries, Nebraska, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 475, Eighty-seventh Congress, at an estimated cost of \$2,122,000.

The project for flood protection on Indian Creek, Iowa, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 438, Eighty-seventh Congress, at an estimated cost of \$1,270,000.

#### *Ohio River Basin*

The project for flood protection on the Kokosing River, Ohio, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 220, Eighty-seventh Congress, at an estimated cost of \$2,438,000.

The project for flood protection on the Mad River above Huffman Dam, Ohio, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 439, Eighty-seventh Congress, at an estimated cost of \$7,930,000.

The project for the Kentucky River, Kentucky, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 423, Eighty-seventh Congress, at an estimated cost of \$26,020,000.

The project for flood protection on the Buckhannon River, West Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 43, Eighty-seventh Congress, at an estimated cost of \$1,206,000.

The project for the Guyandot River and tributaries, West Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 569, Eighty-seventh Congress, second session, at an estimated cost of \$60,477,000.

The project for Twelvepole Creek, West Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 520, Eighty-seventh Congress, at an estimated cost of \$11,000,000.

The project for flood protection on Crab Creek at Youngstown, Ohio, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 440, Eighty-seventh Congress, at an estimated cost of \$2,268,000.

The project for the Scioto River, Ohio, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered —, Eighty-seventh Congress, at an estimated cost of \$55,847,000.

The project for flood protection on the Allegheny River at Salamanca, New York, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 166, Eighty-seventh Congress, at an estimated cost of \$1,390,000.

The project for French Creek, Pennsylvania, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 95, Eighty-seventh Congress, at an estimated cost of \$23,102,000.

The project for the Saline River and tributaries, Illinois, authorized by the Flood Control Act of 1958 (Public Law 85-500), is hereby modified to provide that no cash contribution shall be required of local interests: *Provided*, That the other items of local cooperation recommended by the Chief of

Engineers in House Document Numbered 316 of the Eighty-fourth Congress shall still be applicable.

#### *Upper Mississippi River Basin*

The project for the Illinois River and tributaries, Illinois, Wisconsin, and Indiana, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 472, Eighty-seventh Congress, at an estimated cost of \$71,465,000.

The project for Rend Lake, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 541, Eighty-seventh Congress, at an estimated cost of \$35,500,000.

The project for flood protection on the Mississippi River at and in the vicinity of Guttenberg, Iowa, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 286, Eighty-seventh Congress, at an estimated cost of \$729,000.

The project for flood protection on the Mississippi River between Sainte Genevieve and Saint Marys, Missouri, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 519, Eighty-seventh Congress, at an estimated cost of \$2,500,000.

The project for the Harrisonville and Ivy Landing Drainage and Levee District Number 2, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 542, Eighty-seventh Congress, at an estimated cost of \$1,112,000.

The project for the Columbia Drainage and Levee District Number 3, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 543, Eighty-seventh Congress, at an estimated cost of \$986,000.

The project for the Prairie DuPont Levee and Sanitary District, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 540, Eighty-seventh Congress, at an estimated cost of \$921,000.

The project for flood protection on Richmond Creek, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 571, Eighty-seventh Congress, at an estimated cost of \$4,995,000.

The project for the Joanna Reservoir, Salt River, Missouri, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 507, Eighty-seventh Congress, at an estimated cost of \$63,300,000.

The project for flood protection on the Pecatonica River, Illinois and Wisconsin, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 539, Eighty-seventh Congress, at an estimated cost of \$850,000.

The project for the Mississippi River Urban Areas from Hampton, Illinois, to Cassville, Wisconsin, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 450, Eighty-seventh Congress, at an estimated cost of \$5,350,000.

The project for the Kickapoo River, Wisconsin, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 557, Eighty-seventh Congress, at an estimated cost of \$15,570,000.

The project for flood protection on the Warroad River and Bull Dog Creek, Minnesota, is hereby authorized substantially in



accordance with the recommendations of the Chief of Engineers in House Document Numbered 449, Eighty-seventh Congress, at an estimated cost of \$972,000.

#### *Great Lakes Basin*

The project for flood protection on the River Rouge, Michigan, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 148, Eighty-seventh Congress, at an estimated cost of \$8,659,000.

The project for flood protection on the Sandusky River, Ohio, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 136, Eighty-seventh Congress, at an estimated cost of \$4,300,000.

#### *Truckee River Basin*

The project for flood protection on the Truckee River and tributaries, California and Nevada, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 435, Eighty-seventh Congress, at an estimated cost of \$2,385,000.

#### *San Francisco Bay area*

The project for flood protection on Alameda Creek, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 128, Eighty-seventh Congress, at an estimated cost of \$14,680,000.

The project for Corte Madera Creek, Marin County, California, is hereby authorized substantially in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers in House Document Numbered 545, Eighty-seventh Congress, at an estimated cost of \$5,534,000.

#### *San Joaquin River Basin*

The New Melones project, Stanislaus River, California, authorized by the Flood Control Act approved December 22, 1944 (58 Stat. 887), is hereby modified substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 453, Eighty-seventh Congress, at an estimated cost of \$113,717,000: *Provided*, That upon completion of construction of the dam and powerplant by the Corps of Engineers, the project shall become an integral part of the Central Valley project and be operated and maintained by the Secretary of the Interior pursuant to the Federal reclamation laws, except that the flood control operation of the project shall be in accordance with the rules and regulations prescribed by the Secretary of the Army: *Provided further*, That the Stanislaus River Channel, from Goodwin Dam to the San Joaquin River, shall be maintained by the Secretary of the Army to a capacity of at least five thousand cubic feet per second subject to the condition that responsible local interests agree to maintain private levees and to prevent encroachment on the existing channel and floodway between the levees: *Provided further*, That before initiating any diversions of water from the Stanislaus River Basin in connection with the operation of the Central Valley project, the Secretary of the Interior shall determine the quantity of water required to satisfy all existing and anticipated future needs within that basin and the diversions shall at all times be subordinate to the quantities so determined: *Provided further*, That the Secretary of the Army adopt appropriate measures to insure the preservation and propagation of fish and wildlife in the New Melones project and shall allocate to the preservation and propagation of fish and wildlife, as provided in the Act of August 14, 1946 (60 Stat. 1080), an appropriate share of the cost of constructing the Stanislaus River division and of operating and maintaining the same, such costs

to be nonreimbursable: *Provided further*, That the Secretary of the Army, in connection with the New Melones project, construct basic public recreation facilities, acquire land necessary for that purpose, the cost of constructing such facilities and acquiring such lands to be non-reimbursable and non-returnable: *Provided further*, That contracts for the sale and delivery of the additional electric energy available from the Central Valley project power system as a result of the construction of the plants herein authorized and their integration with that system shall be made in accordance with preferences expressed in the Federal reclamation laws except that a first preference, to the extent of 25 per centum of such additional energy, shall be given, under reclamation law, to preference customers in Tuolumne and Calaveras Counties, California, for use in that county, who are ready, able, and willing, within twelve months after notice of availability by the Secretary of the Interior, to enter into contracts for the energy and that Tuolumne and Calaveras County preference customers may exercise their option in the same date in each successive fifth year providing written notice of their intention to use the energy is given to the Secretary not less than eighteen months prior to said dates: *And provided further*, That the Secretary of the Army give consideration during the preconstruction planning for the New Melones project to the advisability of including storage for the regulation of streamflow for the purpose of downstream water quality control.

The Hidden Reservoir, Fresno River, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 37, Eighty-seventh Congress, at an estimated cost of \$14,338,000.

The Buchanan Reservoir, Chowchilla River, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 98, Eighty-seventh Congress, at an estimated cost of \$13,585,000.

#### *Russian River Basin*

The project for Russian River, Dry Creek, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 547, Eighty-seventh Congress, at an estimated cost of \$42,400,000.

#### *Redwood Creek Basin*

The project for flood protection on Redwood Creek, Humboldt County, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 497, Eighty-seventh Congress, at an estimated cost of \$2,580,000.

#### *Los Angeles River Basin*

In addition to previous authorizations, there is hereby authorized to be appropriated the sum of \$3,700,000 for the prosecution of the comprehensive plan for the Los Angeles River Basin approved in the Act of August 18, 1941, as amended and supplemented by subsequent Acts of Congress.

#### *Rogue River Basin*

The project for the Rogue River, Oregon and California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 566, Eighty-seventh Congress, at an estimated cost of \$106,700,000: *Provided*, That (a) the project is located, constructed, and operated to accomplish the benefits as set forth and described in the report of the district engineer and its appended report; (b) water for all purposes shall be released in the quantities and qualities at points described in the district engineer's report and its appendices; (c) in the years of short water supply all water users will share the available water

in the same proportions that they would share the total full supply when it is available and that no further water-use allocations will be made from the authorized storage so as to retain the maximum possible benefits to authorized uses during the periods of adversity when storage shortages occur.

#### *Columbia River Basin*

The project for the Burns Creek Dam and Reservoir, Snake River, Idaho, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 130, Eighty-seventh Congress, at an estimated cost of \$52,000,000.

The project for the Ririe Dam and Reservoir, Willow Creek, Idaho, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 562, Eighty-seventh Congress, at an estimated cost of \$7,027,000.

The project for the Blackfoot Dam and Reservoir, Blackfoot River, Idaho, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 568, Eighty-seventh Congress, at an estimated cost of \$829,000.

The project for the Asotin Dam and Reservoir, Snake River, Idaho and Washington, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 403, Eighty-seventh Congress, at an estimated cost of \$99,818,000.

The project for the China Gardens Dam and Reservoir, Snake River, Idaho, Oregon, and Washington, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 403, Eighty-seventh Congress, at an estimated cost of \$74,777,000.

#### *Cook Inlet, Alaska*

The project for Bradley Lake, Cook Inlet, Alaska, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 455, Eighty-seventh Congress, at an estimated cost of \$45,750,000.

SEC. 204. That section 205 of the Flood Control Act of 1948, as amended (33 U.S.C. 701s), is amended by, (a) striking out "\$10,000,000" and inserting "\$25,000,000" in lieu thereof, (b) substituting for the term "small flood control projects" the term "small projects for flood control and related purposes", and (c) striking out "*Provided*, That not more than \$400,000 shall be allotted for this purpose at any single locality from the appropriations for any one fiscal year" and inserting in lieu thereof "*Provided*, That not more than \$2,000,000 shall be allotted under this section for a project at any single locality and the amount allotted shall be sufficient to complete Federal participation in the project: *And provided further*, That no construction shall be undertaken on any project under the provisions of this section with a Federal cost in excess of \$1,000,000 unless such project has been approved by resolutions adopted by the Committee on Public Works of the Senate and the Committee on Public Works of the House of Representatives, respectively."

SEC. 205. The consent of Congress is hereby granted to Duke Power Company, its successors and assigns, to construct, maintain, and operate a dam across Savannah River between Anderson County, South Carolina, and Elbert County, Georgia, near Middleton Shoals, and about two hundred and ninety-seven miles above the mouth of said river, for the purpose of providing a pool for condenser water for a steam-electric plant. Construction on such dam shall not be commenced until the plans therefor have been submitted to and approved by the Chief



of Engineers, United States Army, and by the Secretary of the Army, and when such plans have been approved by the Chief of Engineers and by the Secretary of the Army, there shall be no deviation from such plans either before or after completion of said dam unless the modification of such plans has previously been submitted to and approved by the Chief of Engineers and the Secretary of the Army. In approving the plans for said dam such conditions and stipulations may be imposed as the Chief of Engineers and the Secretary of the Army may deem necessary to protect the present and future interest of the United States. Nothing in this section shall be construed to authorize the use of such dam to develop water power or generate hydroelectric energy. The grantee and its successors shall hold and save the United States free from all claims arising from damage which may be sustained by the dam herein authorized, or damage sustained by the appurtenances of the said dam, by reason of the future construction and operation by the United States of Hartwell Reservoir or any other Federal project upstream or downstream from the dam herein authorized. The authority granted by this section shall cease and be deemed null and void unless the actual construction of the dam hereby authorized is commenced within four years and completed within seven years from the date of approval of this section. The right to alter, amend, or repeal this section is hereby expressly reserved.

Sec. 206. The Secretary of the Army is hereby authorized and directed to cause surveys for flood control and allied purposes, including channel and major drainage improvements, and floods aggravated by or due to wind or tidal effects, to be made under the direction of the Chief of Engineers, in drainage areas of the United States and its territorial possessions, which include the following named localities: *Provided*, That after the regular or formal reports made on any survey are submitted to Congress, no supplemental or additional report or estimate shall be made unless authorized by law except that the Secretary of the Army may cause a review of any examination or survey to be made and a report thereon submitted to Congress, if such review is required by the national defense or by changed physical or economic conditions: *Provided further*, That the Government shall not be deemed to have entered upon any project for the improvement of any waterway or harbor mentioned in this title until the project for the proposed work shall have been adopted by law:

Waccasassa River (Levy County and Gilchrist County), Florida.

Valenciana River, Puerto Rico.

Lake Pontchartrain, north shore, Louisiana.

San Bernard River, Texas.

Clear Creek, Texas.

Peytons Creek and tributaries, Texas.

Sacramento River Basin and streams in northern California draining into the Pacific Ocean for the purposes of developing, where feasible, multiple-purpose water resource projects, particularly those which would be eligible under the provisions of title III of Public Law 85-500.

Battle Creek, Sacramento River, California.

All streams in Santa Barbara County, California, draining the Santa Ynez Mountains, except Santa Ynez River and tributaries.

Sec. 207. Title II of this Act may be cited as the "Flood Control Act of 1962".

Mr. BLATNIK (interrupting the reading of the bill). Mr. Chairman, I ask unanimous consent that title I, the rivers and harbors navigation section of the bill, be considered as read and open at any point for amendment.

Mr. CRAMER. Mr. Chairman, reserving the right to object, I understood that the request was going to be made that the entire bill be considered as read. I ask the gentleman from Minnesota not to make such a request.

The CHAIRMAN. Does the gentleman from Minnesota [Mr. BLATNIK] desire to modify the unanimous-consent request made, in accordance with the suggestion made by the gentleman from Florida [Mr. CRAMER]?

Mr. BLATNIK. Mr. Chairman, it would expedite the consideration of the bill and make it more orderly if we disposed of title I first. It should not take long. Then we can proceed in the same order on title II. I would certainly be agreeable that title II be considered as read and open at any point for amendment. It is purely a matter of logical order.

The CHAIRMAN. Is there objection to the request of the gentleman from Minnesota?

Mr. CRAMER. Mr. Chairman, if they are not going to live up to the agreement made, I object, and let us read the bill.

I understood it was agreed that the bill would be considered as read in toto.

Mr. BLATNIK. If the gentleman will yield, I am not aware of any such agreement.

Mr. CRAMER. Then I object.

The CHAIRMAN. Objection is heard.

Mr. BLATNIK. Mr. Chairman, I move that title I—

The CHAIRMAN. The Chair will state that that motion is not in order.

Mr. BLATNIK. Mr. Chairman, I ask unanimous consent that titles I and II be considered as read.

The CHAIRMAN. And open for amendment at any point?

Mr. BLATNIK. Open at any point for amendment.

Mr. CRAMER. Mr. Chairman, reserving the right to object, that does not preclude the right to raise points of order at any time, does it?

The CHAIRMAN. Of course not.

Is there objection to the request of the gentleman from Minnesota [Mr. BLATNIK], that the first two titles will be considered as read?

There was no objection.

Mr. BALDWIN. Mr. Chairman, a parliamentary inquiry.

The CHAIRMAN. The gentleman will state it.

Mr. BALDWIN. Mr. Chairman, do points of order have to be brought up before any amendments are offered?

The CHAIRMAN. The Chair will state that they should be, but they may be raised.

Mr. GROSS. Mr. Chairman, I ask unanimous consent that points of order be in order at any time.

The CHAIRMAN. Is there objection to the request of the gentleman from Iowa?

There was no objection.

The Clerk will report the first committee amendment.

The Clerk read as follows:

Page 5, line 16, strike out lines 16 through 25 and insert:

"Holt lock and dam, Alabama: The Secretary of the Army is hereby authorized and

directed to cause an immediate study to be made under the direction of the Chief of Engineers with a view to providing hydroelectric power generating facilities in said dam, and his report on such study shall be submitted to the Congress by the Secretary of the Army within the first period of sixty calendar days of continuous session of the Eighty-eighth Congress."

The CHAIRMAN. The question is on the committee amendment.

The committee amendment was agreed to.

The CHAIRMAN. The Clerk will report the next committee amendment.

The Clerk read as follows:

Page 7, line 21, insert:

"Lock and dam numbered 3, Big Sandy River, Kentucky, at an estimated cost not to exceed \$200,000; such work as may be necessary for the repair and restoration of said lock and dam: *Provided*, That the work authorized herein shall have no effect on the condition that local interests shall operate and maintain the structure and related properties as required by the Act of Congress approved August 2, 1946 (60 Stat. 1062): *And provided further*, That there is hereby authorized to be expended from appropriations heretofore or hereinafter made for such functions administered by the Department of the Army such funds as may be necessary for the repair and restoration of lock and dam numbered 3 on the Big Sandy River."

The CHAIRMAN. The question is on the committee amendment.

The committee amendment was agreed to.

The CHAIRMAN. The Clerk will report the next committee amendment.

The Clerk read as follows:

Committee amendment: Page 13, line 15, insert:

"Sec. 102. (a) The Act approved August 13, 1946, as amended by the Act approved July 28, 1956 (33 U.S.C. 426e-h), pertaining to shore protection, is hereby further amended as follows:

"(1) the word 'one-third' in section 1(b) is deleted and the word 'one-half' is substituted therefor.

"(2) The following is added after the word 'located' in section 1(b): ', except that the costs allocated to the restoration and protection of Federal property shall be borne fully by the Federal Government, and further, that Federal participation in the cost of a project for restoration and protection of State, county, and other publicly owned shore parks and conservation areas may be the total cost exclusive of land costs, when such areas: Include a zone which excludes permanent human habitation; include but are not limited to recreational beaches; satisfy adequate criteria for conservation and development of the natural resources of the environment; extend landward a sufficient distance to include, where appropriate, protective dunes, bluffs, or other natural features which serve to protect the uplands from damage; and provide essentially full park facilities for appropriate public use, all of which shall meet with the approval of the Chief of Engineers.'

"(3) The following is added after the word 'supplemented' in section 1(e): ', or, in the case of a small project under section 3 of this Act, unless the plan therefor has been approved by the Chief of Engineers.'

"(4) Sections 2 and 3 are amended to read as follows:

"Sec. 2. The Secretary of the Army is hereby authorized to reimburse local interests for work done by them on authorized projects which individually do not exceed \$1,000,000 in total cost after initiation of the



survey studies which form the basis for the project: *Provided*, That the work which may have been done on the projects is approved by the Chief of Engineers as being in accordance with the authorized projects: *Provided further*, That such reimbursement shall be subject to appropriations applicable thereto or funds available therefor and shall not take precedence over other pending projects of higher priority for improvements.

"SEC. 3. The Chief of Engineers is hereby authorized to undertake construction of small shore and beach restoration and protection projects not specifically authorized by Congress, which otherwise comply with section 1 of this Act, when he finds that such work is advisable, and he is further authorized to allot from any appropriations heretofore or hereinafter made for civil works, not to exceed \$3,000,000 for any one fiscal year for the Federal share of the costs of construction of such projects: *Provided*, That not more than \$400,000 shall be allotted for this purpose for any single project and the total amount allotted shall be sufficient to complete the Federal participation in the project under this section including periodic nourishment as provided for under section 1(c) of this Act: *Provided further*, That the provisions of local cooperation specified in section 1 of this Act shall apply: *And provided further*, That the work shall be complete in itself and shall not commit the United States to any additional improvement to insure its successful operation, except for participation in periodic beach nourishment in accordance with section 1(c) of this Act, and as may result from the normal procedure applying to projects authorized after submission of survey reports."

"(b) All provisions of existing law relating to surveys of rivers and harbors shall apply to surveys relating to shore protection and any expenses incident and necessary to investigation and study shall be paid from funds for 'General investigations, civil functions', Department of the Army, and section 2 of the River and Harbor Act approved July 3, 1930, as amended (33 U.S.C. 426), is modified to the extent inconsistent herewith.

"(c) The cost-sharing provisions of this section shall apply in determining the amounts of Federal participation in or payments toward the costs of authorized projects for which the Federal contribution has not been made prior to the date of approval of this Act, and the Chief of Engineers, through the Beach Erosion Board, is authorized and directed to recompute the amounts of Federal contribution toward the costs of such projects accordingly."

Mr. CRAMER. Mr. Chairman, I raise a point of order against the amendment in that it appears clearly in the amendment that it is an appropriation on an authorization bill.

The CHAIRMAN. Does the gentleman from Minnesota desire to be heard?

Mr. BLATNIK. Mr. Chairman, the committee concedes the point of order.

The CHAIRMAN (Mr. WALTER). The Chair sustains the point of order.

The Chair will state, this applies to the entire amendment from page 13, line 15, down to and including line 19 on page 16.

Mr. BLATNIK. Mr. Chairman, am I correct, then, that this applies to the entire section 102, it deletes that section?

The CHAIRMAN. That is correct.

The Clerk will report the next committee amendment.

The Clerk read as follows:

Page 16, line 20, strike "102" and insert "103".

Mr. CRAMER. Mr. Chairman, I raise the point of order against that in that it is no longer necessary with the deletion of section 102.

The CHAIRMAN. Without objection, the amendment is withdrawn.

There was no objection.

The CHAIRMAN. The Clerk will report the next committee amendment.

The Clerk read as follows:

Page 7, line 4, strike out "103" and insert "104".

The CHAIRMAN. Without objection, the amendment is withdrawn.

There was no objection.

The CHAIRMAN. The Clerk will report the next committee amendment.

The Clerk read as follows:

Page 17, line 16, insert:

"SEC. 105. The body of water designated as the Redondo Beach Harbor, California, shall be known and designated hereafter as the Redondo Beach King Harbor, California. Any law, regulation, map, document, record, or other paper of the United States in which such body of water is referred to shall be held to refer to it as the Redondo Beach King Harbor, California."

The CHAIRMAN. Without objection, the amendment will be modified to read "SEC. 104."

There was no objection.

The CHAIRMAN. Without objection, the amendment, as modified, will be agreed to.

There was no objection.

The CHAIRMAN. The Clerk will report the next committee amendment.

The Clerk read as follows:

Page 17, line 23, strike out "104" and insert "106".

The CHAIRMAN. Without objection, that amendment will be withdrawn, as it should be "Section 105", and that amendment is agreed to.

There was no objection.

The CHAIRMAN. The Clerk will report the next committee amendment.

The Clerk read as follows:

Page 18, line 3, strike out "A channel" and insert "Channel".

The committee amendment was agreed to.

The CHAIRMAN. The Clerk will report the next committee amendment.

The Clerk read as follows:

Page 18, line 10, strike out "Sec. 105" and insert "Sec. 107".

Mr. CRAMER. Mr. Chairman, I offer an amendment to the amendment.

The Clerk read as follows:

Amendment offered by Mr. CRAMER to the committee amendment: Strike out "107" and insert "106".

The amendment to the committee amendment was agreed to.

The committee amendment was agreed to.

Mr. WRIGHT. Mr. Chairman, so as to avoid any possible confusion in the numbering of these sections, I ask unanimous consent that the Clerk of the House be instructed so to number these sections serially that they are all in proper sequence.

The CHAIRMAN. The gentleman's

request will have to be made in the House.

The Clerk will report the next committee amendment.

The Clerk read as follows:

On page 32, line 5, strike out "project" and insert "projects."

The committee amendment was agreed to.

The CHAIRMAN. The Clerk will report the next committee amendment.

The Clerk read as follows:

Page 40, line 10, strike out "five" and insert "eight".

The committee amendment was agreed to.

The CHAIRMAN. Are there any amendments to be offered?

Mr. BALDWIN. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. BALDWIN: Page 44, delete all of the words in lines 4 through 8.

Mr. BALDWIN. Mr. Chairman, this amendment would delete the Burns Creek project in Idaho from this bill. As I mentioned earlier, this is a \$52 million public power project. It was before the Interior Committee in the 84th, 85th, and 86th Congresses, and in this Congress. The Interior Committee held hearings on it in the 85th Congress and did not act on it. The Interior Committee held hearings on it in the 86th Congress and did not act on it. The Interior Committee held 4 days of hearings on it in the first session of this Congress, the 87th Congress.

Mr. GROSS. Mr. Chairman, I make the point of order that a quorum is not present.

The CHAIRMAN. The Chair will count. [After counting.] Eighty-one Members are present, not a quorum.

The Clerk will call the roll.

The Clerk called the roll, and the following Members failed to answer to their names:

[Roll No. 268]

Adair	Hall	O'Neill
Alexander	Hansen	Passman
Andersen,	Harris	Patman
Minn	Harrison, Va.	Powell
Anderson, III	Harvey, Ind.	Quie
Anfuso	Hays	Rains
Aspinall	Hébert	Reifel
Belcher	Herlong	Rogers, Tex.
Bell	Hiestand	Roosevelt
Bennett, Mich.	Hoeven	Roudebush
Berry	Hoffman, Mich.	Rousselot
Blitch	Holland	Saund
Bolling	Jones, Mo.	Saylor
Boykin	Karth	Scherer
Breeding	Kearns	Scranton
Brewster	Kee	Seely-Brown
Brown	Kilburn	Shelley
Burke, Ky	Kirwan	Sheppard
Cannon	Laird	Shipley
Celler	Lindsay	Short
Chiperfield	McDonough	Sibal
Coad	McDowell	Siler
Curtin	McIntire	Springer
Davis, John W.	McSween	Steed
Derwinski	McVey	Taber
Diggs	MacGregor	Ullman
Dominick	Magnuson	Utt
Dooley	Martin, Nebr.	Van Pelt
Evins	Mason	Vinson
Fogarty	Michel	Watts
Forrester	Miller,	Weis
Frazier	George, P.	Whalley
Garland	Moorehead,	Williams
Glenn	Ohio	Zelenko
Goodell	Moulder	
Griffiths	O'Brien, III	



Accordingly, the Committee rose; and the Speaker pro tempore having resumed the chair, Mr. WALTER, Chairman of the Committee of the Whole House on the State of the Union, reported that that Committee, having had under consideration the bill H.R. 13273, and finding itself without a quorum, he had directed the roll to be called, when 332 Members responded to their names, a quorum, and he submitted herewith the names of the absentees to be spread upon the Journal.

The Committee resumed its sitting.

The CHAIRMAN. The gentleman from California [Mr. BALDWIN] is recognized.

Mr. BALDWIN. Mr. Chairman, the amendment which I have just offered would strike lines 4 to 8 on page 44 of the bill and would therefore strike the \$52 million controversial Burns Creek public power project in Idaho.

As I mentioned earlier in the debate, this project has been before the House Interior Committee in the last four Congresses. It was before the Interior Committee in a bill in the 84th Congress and no action was taken. It was before the Interior Committee in the 85th Congress, there were 2 or 3 days of hearings held, and no action was taken on it. It was before the 86th Congress in the Interior Committee. There were about 11 days of hearings held and although the subcommittee acted, the full committee took no action on it. In the first session of 87th Congress, the Interior Committee held 4 days of hearings on it and the Interior Committee had a vote on it in February of this year. After being before the Interior Committee for four successive Congresses, the Interior Committee voted on this Burns Creek project in February of this year. The project was defeated by a vote of 17 to 14 by the House Interior Committee.

Then, very strangely, it was suddenly transferred from the Bureau of Reclamation to the Corps of Engineers and submitted to our committee, the Public Works Committee, just a week before our hearings closed on the omnibus bill. The sole witnesses allowed to be heard except the Corps of Engineers were one Member of Congress for it and one Member against it. But all other outside witnesses were prevented from testifying even though it was a highly controversial project. The Corps of Engineers stated that the project would be built by the Bureau of Reclamation, the same agency that tried for four Congresses to get it through the House Interior Committee and was defeated.

The facts of the matter are that these individuals have filed requests with the House Public Works Committee to be heard against the project and were denied the right of a hearing.

The United Mine Workers, who filed a request on June 18, stated in their letter that they were opposed to the project and would like to be heard.

The International Brotherhood of Electrical Workers on June 13 filed a letter with the committee saying they were opposed to the project and wanted to be heard.

The Kemmerer Coal Co. at Frontier, Wyo., on June 5 filed a letter saying it wanted to be heard and was opposed to the project.

The Utah Power & Light Co. on May 31 of this year filed a letter with the committee saying it wanted to be heard.

None of these people was given the right to be heard.

However, you feel on the merits of the project, I believe all the Members of the House in their own hearts and minds believe that whenever a highly controversial project is before a committee the interested people who have filed requests to be heard should be given that opportunity.

Why is there this opposition? Because there is now under construction in Kemmerer, Wyo., in the same general area that would be served by the Burns Creek project, a private power plant that would have a 150,000-kilowatt capacity as compared to the Burns Creek plant capacity of 90,000 kilowatts. It is going to use coal. It has been designed for that use exclusively. This is the first unit of that private power project. It is designed eventually for 500,000 kilowatts. If the Burns Creek project is built, the United Mine Workers expect that the Burns Creek project is going to deprive them of the production of 250,000 tons of coal per year, and deprive many of them of the right of employment.

It is true the first unit of this plant is already under construction and will be built in any case, but the subsequent units of the plant will be postponed or eliminated completely if the Burns Creek project is used.

I believe basically in private enterprise. I believe private enterprise has shown it has the ability to provide the needs of an area. We should first give private enterprise that opportunity. Above all, I believe in the rights of the individuals, the mine workers, the electrical workers, the coal companies, and the power companies involved, to be given an opportunity to be heard before a controversial project of this nature is decided upon.

Mrs. PFOST. Mr. Chairman, I rise in opposition to the amendment.

Mr. Chairman, this measure, as the gentleman from California has said, has been considered by Members of this Congress for several years. In fact, back in 1957 the late senior Senator from Idaho, Senator Dworshak, introduced a Burns Creek bill, as did the then junior Senator from Idaho Senator CHURCH. Congressman Homes Budge represented the second district in Idaho and introduced a bill on the House side. These measures were considered by both the Senate and the House Committee on Interior and Insular Affairs.

In 1958, \$1½ million was appropriated for the construction of the Burns Creek project; in 1959, \$500,000 was appropriated, and in 1960 another \$500,000 was appropriated. In 1961, there was a \$487,500 carryover from prior appropriations.

This means that not only the Appropriations Committee but Members of the House have previously voted the neces-

sary funds to start construction of the Burns Creek project.

Let me say this project should never have become a partisan issue. I had not until last year introduced a bill on the Burns Creek project because it was in the Second Congressional District, represented by Congressman Budge. But in 1961 Congressman HARDING, who replaced Mr. Budge, and I each introduced a Burns Creek bill. We have done everything we could to get it approved. It is not a partisan issue in Idaho. It should not be a partisan issue here in the House of Representatives. The people of the State of Idaho want it. They need it. We have had disastrous floods in that area and additional flood control projects are needed.

The charge has been made by opponents that this has now been turned into a flood control project. This is not true. The amount allocable to flood control by the Army Corps of Engineers is slightly more than \$3 million. It will also provide supplemental irrigation water to 650,000 acres of land already being irrigated. The multiple uses are power, irrigation, flood control and recreation. It will be beneficial for the propagation of fish and wildlife, which is an important resource to our state.

Now in answer to the gentleman from California [Mr. BALDWIN] who said:

Let private enterprise build these projects.

In cross examination during hearings I asked the manager of the Utah Power & Light Co. if the company had transmission lines to service the people in this area who are begging for power to pump irrigation water from underground wells.

He replied that they did not.

I asked if when the Kemmerer plant was constructed and in operation, would the company put in a transmission line to service the people in this area; his answer was, "No."

It seems to me, Mr. Chairman, that a project which has been proven to be necessary, a project having these multiple uses, a project that has been debated for so many years, should be approved by the Congress. It is high time that we get on today with the consideration of this overall public works bill which includes 167 projects affecting some 300 Members of the Congress. I see no reason for pointing a finger at specific projects.

Let me say, further, that the Burns Creek project is an integral part of the large overall Columbia Basin system and one which the Army Corps of Engineers and Bureau of Reclamation have been working closely together on for many years.

The CHAIRMAN. The time of the gentlewoman has expired.

(Mrs. PFOST asked and was given permission to revise and extend her remarks.)

Mr. AUCHINCLOSS. Mr. Chairman, I ask unanimous consent that the gentlewoman from Idaho may proceed for 1 additional minute.

The CHAIRMAN. Without objection, it is so ordered.



There was no objection.

Mr. AUCHINCLOSS. Mr. Chairman, will the gentlewoman yield to me for a question.

Mrs. PFOST. I yield to my colleague.

Mr. AUCHINCLOSS. You said in your statement that this project had been before the Congress and had been considered by many Members of the Congress for a number of years. Would you care to comment on the fact that the standing committee of the Congress rejected it twice?

Mrs. PFOST. Let me say to the gentleman that the Committee on Appropriations for the years 1958 through 1960 certainly did not reject it. Also let me state that even though we were unsuccessful in getting approval by the House Committee on Interior and Insular Affairs, the Corps of Army Engineers was simultaneously making a Columbia Basin study. The Snake River drains 109,000 square miles in Idaho, Washington, and Oregon. The portion taking in the Burns Creek and surrounding areas covers a 5,750-square-mile drainage area above Heise, Idaho, in southeastern Idaho and western Wyoming. The Army Corps of Engineers recognized the need for this project in the upper reaches of the Snake River for the multiple benefits it would provide.

Because of the importance of this project to the Columbia River Basin system, the Corps of Army Engineers continued with their studies these several years and have finally come out early this year with a strong favorable report for the construction of the Burns Creek project. I hope it will not be deleted from our public works bill.

Mr. KYL. Mr. Chairman, I move to strike out the last word.

(Mr. KYL asked and was given permission to revise and extend his remarks.)

Mr. KYL. Mr. Chairman, it is entirely incongruous that this matter comes before us in this bill today. The project was considered by the Interior and Insular Affairs Committee. The gentlewoman from Idaho, for whom I have such great affection and esteem, is correct when she says it is a nonpartisan matter. The committee has the same ratio of Democrats and Republicans as the other committees of the Congress. The chairmen of both the committee and the subcommittee are of the majority party.

The gentlewoman from Idaho has said that the Corps of Army Engineers has placed in the record complete factual information which would lead anyone to think this project is desirable and should be completed at this time.

I think the Members of the House should know, Mr. Chairman, that the Engineers in report No. 4 for the Interior Department concerning the Upper Snake River Basin, Burns Creek, dated March, 1962, had these things to say about Burns Creek. Now, remember this was an Interior project. The Engineers come to the committee now, not the Interior Committee, but the Public Works Committee, to try to get a project not for the Engineers, but for the Reclamation

Bureau. These were the facts stated by the Engineers in March 1962.

This report states that the Corps of Engineers has reviewed the Bureau of Reclamation's design plans and found them entirely inadequate. More than that, the corps now forecasts that further exploration will show serious deficiencies in foundation conditions which would result in greatly increased costs over those predicted here today. In the exact words of the Corps of Engineers:

A considerable amount of additional exploration may be necessary for final design \* \* \* the indicated additional investigation could disclose foundation conditions that would result in increasing costs.

But these new costs which involve the most expensive part of any dam—the foundation—are not included in the \$52 million price tag we are looking at today.

Foundation costs are not the only added costs developed by the Corps of Engineers which have been conveniently omitted in today's cost estimate. The corps says:

In order to use the lower 100,000 acre-feet for flood control, lowering of the outlet works or installation of a second tunnel would be required which could increase the project cost materially.

I submit that the \$52 million price tag is but a foot in the door. I have great aversion to authorizing a project at a fictitious cost figure after an agency of our Government, in a formal engineering report, says flatly that the essential foundation will cost more and that the flood control facilities will cost more.

But these are not the only items where the cost picture will change for the worse. The Corps of Engineers in Interior Report No. 4 says that proper use of Burns Creek to take advantage of flood control opportunities will require changes in the Bureau of Reclamation's operating procedure at the expense of some power production. Loss of power production will mean loss of claimed revenues.

Now here is a project that was the subject of full hearings before the House Interior and Insular Affairs Committee and turned down after exhaustive examination. Burns Creek then was a \$48,700,000 project that, by Bureau figures, failed to pay its own annual cost by \$311,000 a year. Now the admitted cost is \$52 million and the actual cost when the inadequacies of foundation conditions and flood control facilities are corrected must be millions more.

Have the Bureau's feasibility figures changed to compensate for the higher costs? They have not—not one iota. They have not even been adjusted to compensate for the increase from the \$48 million to the \$52 million figure, let alone for the additional expense Interior Report No. 4 makes evident. What the annual loss would actually prove to be if we were provided with a realistic accounting of an accurate price tag is something we have not been told.

To be fair to the taxpayers who always end up by paying the bill when we authorize projects with misleading financial information, and to assure ourselves that at least we are voting on conditions that

actually exist, this Burns Creek project should be sent to the Interior and Insular Affairs Committee so it can examine the new costs revealed by the Corps of Engineers. In good conscience I cannot see how we could do otherwise.

Mr. ASHBROOK. Mr. Chairman, I move to strike the requisite number of words.

Mr. Chairman, I want to associate myself with the remarks of the gentleman from Iowa. I am also a member of the Committee on Interior and Insular Affairs.

Mr. Chairman, the word "reclamation" has high political appeal in the West and to a somewhat lesser degree so does flood control. Now, I know of no reasonable man who will argue the merit of bona fide reclamation projects which the facts have proven to be economically feasible and the construction of which would be in the overall national interest. The same may be said about projects with bona fide and realistic flood control features. However, it is the firm responsibility of the Congress, a sacred trust, to obtain all the technical and economic facts about any so-called reclamation or flood control project, to conduct open and complete hearings, and, after taking under advisement the views expressed in support of and in opposition to the project and after careful and objective consideration of the facts, to decide whether or not the project is worthy of approval.

Mr. Chairman, the omnibus rivers and harbors and flood control bill reported by the Committee on Public Works includes a project which, if authorized, would constitute a gross violation of our sacred trust to screen out unworthy and uneconomic projects. This is the \$52 million Burns Creek project proposed for construction in southeastern Idaho. Burns Creek has already been carefully evaluated by the Committee on Interior and Insular Affairs and found wanting. It was defeated by committee vote on February 7, 1962. I am certain the committee was surprised, shocked, and insulted to find Burns Creek turning up like a bad penny in the omnibus authorization bill—especially on the basis of masquerading this project as a flood control project.

Reclamation and flood control jointly occupy a warm spot in the heart of many of us far removed from the reclamation States. I certainly am sympathetic to flood control projects since I have meritorious projects in my own district. But we would be derelict in our duty if we did not weed out expensive, unnecessary projects which entail a gross waste of public funds. Burns Creek is such an unnecessary and uneconomic project.

Mr. Chairman, in my opinion Congress has already abdicated too many of its prerogatives and obligations by giving excessive administrative control and decision to the experts in the Executive agencies in the planning and selection of water resources projects. Is the Congress now so inferior to the bureaucratic agencies that the experts can tag just any rag-tail project with a reclamation or flood-control label and ram its authorization down our throats? Are the



legislative bodies now the weak sisters of our American system of checks and balances? I think it is high time we re-assume our rightful prerogative of full control over the project authorization process. There is no better place to start than with Burns Creek.

This project is a classic example of wasteful spending at its destructive worst. The cost of \$52 million, according to the latest estimates of these executive agency experts, is already a substantial increase from previous estimates. I defy anyone to tell me what the final cost would be. We can be sure it is not going to stop at \$52 million. It is uneconomic. It is obviously and admittedly a power project since 98 percent of its construction costs are allocated to hydroelectric power generating facilities. By itself it can never repay to the Treasury its reimbursable construction costs. In fact, annual power revenues from Burns Creek would be over \$350,000 less than required to pay the interest obligation which the experts have presumptuously assumed at only 2.632 percent. The experts have therefore proposed integration of Burns Creek electrically, hydraulically, and financially with an already authorized and operating self-liquidating reclamation project, Palisades upstream. In other words, these experts intend to subsidize the uneconomic Burns Creek power project with revenues from a good reclamation project, Palisades. And this is the project we are now considering even though it was rejected as unworthy by the Committee on Interior and Insular Affairs only 8 months ago, a committee on which I have the honor to serve.

Reclamation is going to lose a lot of eastern friends if this sort of thing keeps up. There is no rational justification of Burns Creek except to supply subsidized Federal electricity to a few select special-interest groups in southeastern Idaho. We should not permit authorization of an unnecessary project which will benefit only a very small region at the expense of others. I submit that Burns Creek means \$52 million of spending which cannot be justified.

(Mr. ASHBROOK asked and was given permission to revise and extend his remarks.)

Mr. HOSMER. Mr. Chairman, will the gentleman yield?

Mr. ASHBROOK. I yield to the gentleman from California.

Mr. HOSMER. Mr. Chairman, I also wish to associate myself with the remarks of the gentleman from Iowa. He has very carefully and very accurately painted the picture of this project. Its costs far exceed those that are printed in the committee report here and the revenue structure will be impeded if this project is built. I think it would be a great reflection on the soundness of judgment of this Congress should this project remain in the bill.

Mr. HARRISON of Wyoming. Mr. Chairman, will the gentleman yield?

Mr. ASHBROOK. I yield to the gentleman from Wyoming.

Mr. HARRISON of Wyoming. Mr. Chairman, I want to clear up one statement that was made here recently re-

garding testimony before the Committee on Interior and Insular Affairs today on this project.

As a member of that committee I sat through the hearings. When the question, as stated on the floor, was asked the representative of the Utah Power Company, whether or not they would furnish or build lines in this area, the answer was no. The reason was given that because of a power hookup and the Utah Power Co. and the Idaho Power Co. it would not be necessary to build lines in there because it would be uneconomical to go that distance, but the area could be and would be served and was being served with power presently in existence within the Utah Power Co. and the Idaho Power Co.

I opposed this project, the State of Wyoming opposed it, because it is uneconomical. I resent the fact that the people from my State, the State itself, and others have been denied the privilege of appearing before the committee on a project which is as important to the people as this one is. I think it is poor legislative procedure. I think it is improper to take a bill which has been acted upon in good faith by one of our standing committees and then within a period of a few months give it to another committee and pursue an entirely different theory.

I hope the Members of the House will see the fairness of the position of those who oppose the project and will sustain the motion to strike, and will consider allowing a full and open hearing in the next session of the Congress.

(Mr. DENT asked and was given permission to extend his remarks at this point in the RECORD.)

Mr. DENT. Mr. Chairman, water is not the only resource we need be concerned with. Coal is a resource and an important one too. Burns Creek, mislabeled with the good name of reclamation or partially hidden under a flimsy veil of extremely nebulous flood-control benefits, is still nothing more nor less than a poor and uneconomical power project. Burns Creek by any name would still be extremely detrimental to the ailing coal industry in the surrounding States. The coal mining companies and labor unions have, and continue to, vigorously oppose Burns Creek. The State of Wyoming and the Wyoming Natural Resource Board unqualifiedly oppose Burns Creek. All requested an opportunity to appear and testify in opposition before the Public Works Committee but were arbitrarily deprived of their right to be heard.

I wonder how long eastern Congressmen and their tax-paying constituents will continue to shell out hard-earned tax dollars to subsidize Government power generation to a small, select and self-interested handful of privileged citizens? Most of the electric power which would generate at Burns Creek would go to three growing and prospering communities serving urban residents and business organizations. A favored few would gobble up the excessively priced benefits of Burns Creek with the Nation's hard-pressed taxpayers paying the bill.

In addition, every kilowatt-hour of power generated at Burns Creek would

replace 1 pound of coal on the market—a pound which would be mined, marketed, and burned in a steam generator to produce an equivalent kilowatt-hour if Burns Creek did not exist. The power developed at Burns Creek would displace 20,000 man-shifts per year in the already depressed coal industry, an employment equivalent to 250,000 tons of coal mined annually, with a loss of \$275,000 in mine payroll and \$225,000 in supplies purchased locally. And also a reduction in annual State and local taxes of \$18,000 and of annual payments to the United Mine Workers of America health, welfare, and retirement fund of \$100,000.

The little town of Kemmerer, Wyo., would be particularly hard hit by the detrimental effect of Burns Creek. Kemmerer was founded as the center of the coal mining industry in southwestern Wyoming. Over the years the economic health of Kemmerer has fluctuated with the ups and downs of the coal industry. The coal fields of southwestern Wyoming have felt the full impact of the current depressed state of the coal business. Now, a utility company is building a large coal-burning thermoelectric plant near Kemmerer. New hope and new life have been given to the town of Kemmerer. The citizens in the area are seriously concerned with the effect of Burns Creek.

The mayor of Kemmerer traveled all the way to Washington in 1959 to appear before the Senate Subcommittee on Irrigation and Reclamation in opposition to Burns Creek. That is how concerned he was. I am particularly impressed with one statement the mayor made at that time. This is his statement:

I should like to emphasize to you that the people of this area of Wyoming are appearing before this Senate committee without any intention of asking for Government assistance or aid, nor do we ask this committee to expend one dollar of the taxpayer's money in our behalf. We are here simply to request that you do not put a stumbling block in our way, to ask that you allow us to work our own destiny and to develop our economic future with our own capital and our own initiative.

This has the clarion ring and virile spirit of our forefathers who fought to make America great. We cannot afford to put a stumbling block in the way of citizens whose spirit reflects so nobly the traditional spirit of American get-up-and-go. We cannot afford to let an uneconomical, unnecessary power project slip by under the false guise of reclamation or flood control.

Mr. EDMONDSON. Mr. Chairman, I rise in opposition to the pending amendment.

Mr. Chairman, a couple of things should be said to set the record straight in connection with this particular project.

I am one of the members of the Committee on Public Works who also sat on the Committee on the Interior and Insular Affairs, and I listened to the evidence with regard to this project.

There are three members of the Committee on Public Works at the present time who sat on the Committee on Inte-



rior and Insular Affairs and heard the evidence on this project. I think the record will show every member who heard the evidence over in the Committee on Interior and Insular Affairs voted to report this project out in the Committee on Public Works.

The plain fact of the matter is this is a good project. It was good enough to get the recommendation of the Bureau of the Budget under the Eisenhower administration when the man who represented that district was a member of Mr. Eisenhower's party.

When you get right down to the meat in the coconut, this bill failed to be reported out of the Committee on the Interior and Insular Affairs for one reason, and no other, and that is that some of the members of the other party who were champions of the bill when the district was represented by a Republican Congressman turned a flip in mid air and opposed this project when we got a Democratic Representative from that district who was sponsoring the bill. The record will show that in the Committee on Interior and Insular Affairs. This is a good project. The Eisenhower engineers said it was a good project, the Eisenhower Bureau of the Budget said it was a good project.

The Engineers and the Bureau of the Budget of this administration have said it is a good project.

Mr. Chairman, it has been said it has no flood control in it. The report shows on page 224 thereof, if the Members of the Committee will take the time to look at it, that there are annual benefits of \$120,000 a year in flood damage prevention under this project.

Mr. Chairman, insofar as the benefit-cost ratio is concerned, it is 1.7 to 1. That is a good project ratio by any standard. It was good enough to be something that our distinguished minority leader identified himself publicly with under the previous administration.

Mr. Chairman, I say to the Members of the Committee that we ought to stand together in support of this committee bill, and approve this project.

Mr. LANGEN. Mr. Chairman, I move to strike the requisite number of words.

(Mr. LANGEN asked and was given permission to revise and extend his remarks.)

Mr. LANGEN. Mr. Chairman, I am sure that it is the desire of every Member of this House that they serve the best interests of this Nation. I should say to the Members of the Committee that you have an excellent opportunity to do so by supporting the Baldwin amendment that is now before us for consideration. I say this as a member of the Committee on Interior and Insular Affairs, as a member of the subcommittee that has held hearings on this project ever since I came to Congress; yes, for 4 years we have been seriously concerned with this project. I cannot for the life of me understand how or why we should even have the project before us at this point, when that committee, after the most complete and extensive hearings, after having heard all

the people who have an interest testify before that committee, and after the judgment of that committee then is such that it has turned it down, but definitely, just a matter of a few months ago.

Mr. Chairman, it has been said just a few minutes ago that this was such a good project and it had the support of any number of people. If that were the case, then I must obviously ask the question: Why? How come it was not approved prior to this time? How come it has not received approval at any time where hearings have been held and where there has been a complete analysis of the cost factors, of the need factors, and all of the items involved that have been heard and considered? The answer is simple, it is a bad project.

Mr. Chairman, permit me to relate to the members of the committee just a few of the objections, and I wish I had time to go over all of them: This project in its own right could not stand up by itself under any circumstances. As a matter of fact, if the power revenues were called upon to pay for this project, they would have to raise the rates to such a degree it would be completely unfeasible. This is no secret to the members of the committee. Everyone knows it. As a matter of fact, in order to make it pay out at all they are going to have to take over \$30 million of profits from the Palisades project moneys that would otherwise go back into the Federal Treasury, if you please.

Mr. Chairman, then there is the matter of need. There was no evidence submitted to the committee that there was any need. In fact, there was evidence to the reverse, that there was every possibility that all of the electrical needs of that area would be supplied, could be supplied, and that there definitely was not any need for this kind of a project.

Mr. Chairman, permit me to bring into consideration one further item: This project in addition will aggravate one of the items that has been before this House constantly during this session, that of unemployment. This is why the electrical workers, the United Mine Workers, have all expressed their opposition to it. Why? Because it means less jobs in the United States, and I ask the members of the committee whether or not this has not been one of the truly great concerns of this session of Congress?

If we piece all of these items together—first, that there is not any need; and secondly, that it is a completely infeasible project; and thirdly, that it can do nothing but aggravate problems that already exist, then how in the name of common sense can this House on this day approve this project, when we know that the recommendation has come to us without having heard all the testimony that has been presented in connection with it? It seems so inconsistent to me, when you have a committee whose prime purpose it has been to give consideration to this matter, that has gone into it thoroughly and completely—and there are those of us who

sat through all these hearings—when that committee arrives at a decision and then we circumvent it in this manner, why do we even have our committee? Why do we go through that entire process, having given those who appeared as witnesses the assurance that their statements were going to be given consideration? They have every right to expect that their efforts should be respected. Do you need any more evidence than these I have referred to to turn down this project?

Mr. SAYLOR. Mr. Chairman, I move to strike out the requisite number of words.

Mr. Chairman, what is involved in the question that is before you today and at this time is not merely that of a project. It involves the very integrity of the House of Representatives. If you, as Members of the House of Representatives, believe in the committee system, then you have no choice but to support this amendment and to strike this provision from this bill.

Why do I say that? The first bill on this project was presented several Congresses ago by Congressman Budge and Senator Welker as a result of a communication from the Interior Department. It was referred to the House Committee on Interior and Insular Affairs, it was referred to the Senate Committee on Interior and Insular Affairs, and after thorough hearings in each succeeding Congress it was defeated.

As a result I want to call your attention to certain startling facts. This is here as a flood control project. In February of this year, the Army Engineers who are charged with the responsibility of telling the House of Representatives how much flood control there is in any project, submitted their statement to the House and Senate committees and said that of the \$48 million involved in this project there was not one penny's worth of flood control.

I defy any Member of Congress or anyone in this room to rise and challenge that statement.

Mr. EDMONDSON. Mr. Chairman, will the gentleman yield?

Mr. SAYLOR. I yield to the gentleman.

Mr. EDMONDSON. The Public Works Committee report on page 225 indicates \$120,000 of annual flood control.

Mr. SAYLOR. That is not the question I asked. I defy anyone to find in the report that was given to the House Committee on Interior and Insular Affairs where there was 1 cent's worth of flood control; not a penny.

After it was defeated in the House Committee on Interior and Insular Affairs, after full and complete hearings, people went down and asked them how they could get this project through. They went to the Army Engineers. This is the same group that for years has declared in report after report that there is no flood control in this project. They took the same project, and they now added the report that you have before the House Committee of Public Works.



I can tell you that if this goes through you might as well forget about your committee system in Congress, because all you have to do is have a bill defeated in one committee, go down and get somebody in a department downtown to take the same project, with no study whatsoever, change a figure or two, reshuffle all the figures, then bring it to another committee that might be more favorably disposed to it, and end up in getting it passed. This is what is involved in this project.

There is absolutely no need for this project at this time. What started out to be a small re-regulating reservoir costing about \$5 million has now grown to be a public power project costing over \$50 million.

In the testimony, session after session before our committee, they admitted that 97 and a fraction percent of all the benefits on this project were going to be power. The testimony is replete that the power produced at this site cannot be sold, at the same price as Palisades Power. This power will be so expensive that if sold at that rate it will not even pay the interest on the bonds.

The only thing you can do this afternoon by voting for this project is to defy the committee system of Congress, and put on the books a project which will drag down reclamation into the dirt. I challenge you from the West to vote for this amendment.

Mr. HARDING. Mr. Chairman, I rise in opposition to the amendment.

Mr. Chairman, I feel very humble as I stand before the House this afternoon because I was raised in the Snake River Valley of Idaho. I know what water means to the farmers of Idaho. When people say this is a power project, I reply that the impetus for the Burns Creek project started with the dirt farmers and the water users.

This project has had unanimous support in the State of Idaho except for two power companies. The chambers of commerce of many small towns in Idaho after hearing the testimony on Burns Creek both pro and con have gone on record supporting this project.

I would like to review the history of the Burns Creek project before this Congress; it has twice passed the Senate, once on the Consent Calendar and once on a voice vote. It is true that it has been rejected only once in the Interior Committee. It has never come to a vote before in the full Interior Committee before this year. The Subcommittee on Irrigation and Reclamation, after hearing lengthy testimony on the project, has voted twice to approve it, once on a voice vote again, and again by a vote of nearly 2 to 1.

I might say further, Mr. Chairman, that what the gentleman from Oklahoma said is true. I am sorry it is true, but two of the minority members in the Interior Committee that were two of the foremost sponsors of the bill 2 years ago have now reversed their position and voted against Burns Creek this year. Even though the leaders of the Republican Party are on record all over the United States of America as supporting the Burns Creek project, including Presi-

dent Eisenhower, Vice President Nixon, and even our distinguished minority leader, CHARLIE HALLECK. They have all declared their support for the Burns Creek project, yet, there has not been one member of the minority party so far who has voted for the project in four committee votes this year. I just want to say that our farmers in Idaho are not Democrats and Republicans—they are Americans. They want this project. They need it. It is a good project. It has been recommended by the Corps of Engineers, by the Department of the Interior, and by the Bureau of the Budget. I sincerely hope the House will in its wisdom approve this project which is so desperately needed in the State of Idaho.

Mr. CRAMER. Mr. Chairman, I move to strike out the last word and rise in support of the amendment.

Mr. WIDNALL. Mr. Chairman, will the gentleman yield?

Mr. CRAMER. I yield to the gentleman.

Mr. WIDNALL. Mr. Chairman, I would like to ask permission to speak out of order.

The CHAIRMAN. Without objection, it is so ordered.

There was no objection.

Mr. WIDNALL. Mr. Chairman, I would like to announce that Astronaut Schirra has landed and has completed his six orbits around the earth. I make this announcement with pride because he comes from my congressional district. He is another great example of a wonderful team we have working for us. It is a great source of satisfaction to our country.

Mr. DAVIS of Tennessee. Mr. Chairman, will the gentleman yield for a unanimous-consent request?

Mr. CRAMER. If it does not come out of my time, Mr. Chairman, I yield.

Mr. DAVIS of Tennessee. Mr. Chairman, I ask unanimous consent that all debate on this amendment be closed at the conclusion of the remarks to be made by the gentleman from Florida [Mr. CRAMER].

The CHAIRMAN. Is there objection to the request of the gentleman from Tennessee?

There was no objection.

Mr. CRAMER. Mr. Chairman and members of the committee, I too am delighted to hear that Astronaut Schirra has successfully orbited the earth six times. I am hopeful that we can do an equally American job here on the floor of the House today and bring this bill down out of orbit and onto the ground and on a sound fiscal basis by eliminating the Burns Creek project.

Now we have heard a lot of politics and we have heard a lot of discussion about who voted how and why. I just wonder if someone on the other side of the aisle could answer a question, and I do not think it is answerable, if this is such a good project and there is no politics in it, why in the world, when our distinguished former colleague from Idaho, Hamer Budget, who was trying so hard to get this project through for so many years, did the Democratic Congress consistently time and time again not even vote the thing out of the com-

mittee? For the obvious reason, there is something wrong with it.

Now we set ground rules when we were considering this bill at this last hour knowing that we were going to have problems procedurally if we tried to get through a controversial bill. Those ground rules were: First, there should be no controversial projects in this bill; and second, they should have clearance of all the departments. The Burns Creek project is about as controversial a project as you possibly can get as the history of the project itself indicates. This project was turned down by the Democratic controlled committee which has an 18 to 13 membership on the Interior and Insular Affairs Committee by a vote of 17 to 14. Does that sound like it is partisan? Of course not—it is a bad project. I say to you, we ought to think twice for the great people of the two great States who are opposing this project, if we put it in this bill without giving their representatives even an opportunity to be heard. That is the procedure that has been followed with regard to this legislation. The committee has not had an opportunity to be heard on this project. It is, as I said, as controversial as you can get.

The Burns Creek proposal in the omnibus bill has been imposed on the House in one of the slickest maneuvers we have seen in recent times. How did it get here? The Bureau of Reclamation proposed it in 1957. From 1957 to the beginning of this year it was before the Interior and Insular Affairs Committee. It was killed.

Stage 2: Here we are now. The Bureau of Reclamation does a fadeout and the Corps of Engineers in March does a fade-in. They filed a report on Burns Creek, recommending it for construction by the Bureau of Reclamation. Can you imagine the Corps of Engineers making a study, finding less than 10-percent justification for flood control, and the Corps of Engineers not going to construct the project which is always the case on projects which come before our committee, but the Bureau of Reclamation is going to have jurisdiction over this project? What a sleight-of-hand performance.

From the Interior Department, Bureau of Reclamation, all of a sudden to the Corps of Engineers, and from there it goes back to the Bureau of Reclamation. That is what is being done.

Stage No. 3: The approach now is to expose the Burns Creek project to action by Congress without any searching analysis or any hearings of any kind. That is what is happening.

Let me direct attention to a few more problems involved. This is part of the total Columbia River Basin program. The other body has included in their bill—and I have it right here, and this is what we are going to be faced with when we get to conference—they have Knowles Dam, they have Bruces Eddy. All of you know about these projects, you know they are controversial. But they are in the Senate bill. I suppose next we will be faced with China Gardens. The cost is \$1,400 million.

Mr. Speaker, the project proposed in this omnibus bill has been imposed on



the House in one of the slickest maneuvers we have seen.

Let me explain just how Burns Creek has come up before us. The Bureau of Reclamation first proposed this project in 1957. From 1957 to the beginning of this year it was before the Interior and Insular Affairs Committee where it rightfully belonged. That committee examined Burns Creek about as thoroughly as any project has ever been examined and they found it was not meritorious. They expressed their final disapproval in February, 1962 when they refused to report it. This is stage 1.

Next comes stage 2. The Bureau of Reclamation does a fadeout and the Corps of Engineers, in March, comes out with a hasty report on Burns Creek, recommending it for construction by the Bureau of Reclamation. Read the report and you find some mumbo-jumbo about flood control which puts the stamp of legitimacy on the switch of Burns Creek from Reclamation to Corps. And so, because the Corps is now the sponsoring agency but still to be administered by the Department of the Interior the project must go to the Public Works Committee. As the teenagers say, neat. By this simple stratagem, the Committee on Interior and Insular Affairs is bypassed and the project is ready to come before the Committee on Public Works.

Then comes stage 3. The approach now is not to expose the Burns Creek project to any sort of searching analysis. So the Public Works Committee publishes no schedule of projects they are going to consider for the omnibus bill. In fact, they let it be known that this bill, because it has been so hastily thrown together in these last few days of the session, would not include any controversial projects.

And I can assure my colleagues, if they do not already know it, Burns Creek is just about as controversial as you can get. Then, one quiet day, the flood control committee slips Burns Creek into the bill on a few minutes of testimony by a Corps of Engineers witness. When word of this leaks out and the telegrams of protest begin flooding the committee from witnesses who wanted to be heard in opposition, the committee, in a most undemocratic fashion, ignores everyone of them.

This, my friends, is how we come to consider the Burns Creek project in the omnibus bill today.

Let me draw attention to a few more inconsistencies.

First, if this is a reclamation project then it belongs with the Bureau of Reclamation and it should be before the Committee on Interior and Insular Affairs where it was before.

If it is a flood control project, then it rightly belongs with the Corps of Engineers and can come before the Public Works Committee. But—and this is a big but—then the Corps should construct it, not as they have recommended, the Bureau of Reclamation. Obviously, therefore, this is simply a device to get this project out of one committee and into another.

Next, it must be remembered that this project has been rejected in the course

of the regular legislative process. What we are dealing with now is a cynical perversion of this process.

I would further point out that in May of this year the Public Works Committee held hearings on some 10 or more Corps projects, saying it did not intend to hold any more hearings. But suddenly, within the last few days, and with ill considered haste, the committee hauls out the barrel and stuffs it with controversial projects. This is done in hearings so blatantly and obviously staged to prevent any opposition whatsoever from being heard and I would be ashamed for this body if the bill goes through as it has been presented to us.

The demerits of Burns Creek do not need elaboration here. The project simply is no good. The record has already established that. It should be sufficient to know that we have seen a tremendous concerted, well-organized effort go into covering up that record. I hope the majority of my colleagues will be alert to this and will register their protest by voting for the elimination of this project from the bill.

The Burns Creek Dam and Reservoir has no place in the omnibus rivers and harbors and flood control bill. It fails to meet even minimum previously accepted standards for economic and financial feasibility. It is being paraded as a flood control project only because it was rejected as a reclamation project this year by the Interior and Insular Affairs Committee of the House of Representatives after 5 years of consideration. Moreover, if it were a flood control project, it would be a Corps of Engineers responsibility and not a Bureau of Reclamation project as proposed in this bill.

The Burns Creek project was recommended to the Congress as a Bureau of Reclamation project on April 4, 1957—see House Document No. 147, 85th Congress. Extensive hearings were held by the House Interior and Insular Affairs Committee in 1958, 1959, 1960, and 1961. The committee after thorough and searching examination consistently refused to approve the project for Congressional authorization. The latest action of this committee occurred on February 7, 1962, when it rejected the proposal by a rollcall vote.

When the Bureau of Reclamation was unsuccessful in inflicting its will on its counterpart committee in the Congress—the Interior and Insular Affairs Committee—which is responsible for and intimately familiar with the program of this agency, it arranged for an end run around this committee by having the Corps of Engineers prepare a quickie report recommending this project for construction by the Bureau. Obviously the Corps of Engineers could not conduct any real study or prepare any intelligent report in that short period of time and the report in effect so states. The Corps has not even investigated the damsite. Except for some minor reexamination of the flood control potentials of the project, the Corps' studies were limited to a summary and evaluation of the report of the Bureau of Reclamation on the project.

The corps review of the Bureau's designs indicated that "a considerable amount of additional exploration will be necessary for final design" of the dam. If this is true, it would be difficult to assure that the cost estimates can be firm. Burns Creek was selected as a project for early construction because of the need "to insure more adequate control of stream flows." Evidently, the control is now adequate and there is no problem with floods.

The report shows that it is practical to forecast seasonal runoff volumes on the Snake River with reasonable accuracy, that rainstorms are not a major factor in runoff production and that extensive regulation and a "fairly high degree of protection" from floods now exists. The original analysis of the corps used in connection with the Bureau of Reclamation's earlier reports determined that net flood control benefits from the Burns Creek project would be minor. The flood damages now cited in the report represent those that would have occurred under original conditions, and there are no data to show how these figures are adjusted to present conditions. Furthermore, the basis for changing the original conclusions are not shown. There is no space allocated for flood control storage and the operation of the Burns Creek project for power is a major use.

The appendix purporting to show how the standard project flood was designed is nothing more than an exposé of various approaches to the science of synthetic flood design and concludes that the flood damage and benefit estimates "should be verified or revised by a conventional derivation in substantial accordance with Civil Works Engineer Bulletin No. 52-8." The corps appears to be straining to find some flood control advantages for the project. Nevertheless, in spite of the historical and very real question as to whether there is any measurable flood control need or benefit in the Burns Creek project, some flood control has been claimed as a purpose and costs have been allocated to it. Apparently, therefore, this was done for reasons other than physical, economic or financial justification or merit and is why the corps report fails to mention the legislative history of the project. The report appears to be merely a bold device for putting a new face on the Bureau project to make it logical for Public Works Committee consideration.

There is nothing new in the corps report which was not available to the Congress in its earlier considerations of the Burns Creek project.

Facts developed during previous hearings show Burns Creek to be an extremely uneconomical project. The total Burns Creek net annual revenue would fall over \$300,000 short of even meeting the annual interest payments on the project costs—at 2.632-percent rate—without repaying 1 cent of the principal. Therefore, the Bureau of Reclamation would have to integrate it with the upstream Palisades project in Idaho to make it appear feasible. Surplus revenues from a good reclamation project—Palisades, would be used to subsidize a



poor power project—Burns Creek, thereby deferring the payout of Palisades some 33 years or 24 years beyond the 40-year period established by law for reclamation projects.

The merits or demerits of this project have not been fully discussed before either the Flood Control Subcommittee or the full Committee on Public Works of the House of Representatives. The Public Works Committee has not had the benefit of testimony of those opposed to the authorization of this project. In fact, several individuals from the project area—who represent both labor organization and business—requested time to be heard in opposition to Burns Creek and were specifically denied that opportunity.

The project is being railroaded through the Congress by a committee which has approved the project without adequate study and consideration of the many factors involved and in direct contempt for the decision of the committee which considered the proposal in accordance with established procedures and which reached its conclusion on the basis of all the facts. This is a travesty on the democratic process and an insult to the Congress.

To include a project of this controversial nature in the public works omnibus bill at this late date in the legislative session can only be construed as an obvious pork barrel effort and legislative irresponsibility. It was recognized that proper ground rules for consideration of this bill at this late date was that only noncontroversial projects would be included. Since no witnesses were permitted to appear except the Corps of Engineers, this bill can only be considered as being the result of one point of view. There is no wish here to impugn the testimony of the Corps of Engineers for they have a right to express their thinking on the project. But, to include a project that has had the benefit of only the executive department's views is more in keeping with the method of government in the Soviet Union than with the legislative traditions of the U.S. Congress. The attempt to get an omnibus bill out at the last minute without hearing witnesses in opposition who otherwise would be entitled to be heard on the basis that the proposed projects are noncontroversial, shows favoritism and pressure politics of the worst kind. This type of last-minute, narrowminded legislating must be avoided. There is nothing so urgent about Burns Creek that we must abandon established democratic legislative procedures.

Therefore, I sincerely urge the deletion of the Burns Creek Dam and Reservoir from this bill and passage of the Baldwin amendment.

The CHAIRMAN. The time of the gentleman from Florida has expired. All time has expired.

The question is on the amendment offered by the gentleman from California [Mr. BALDWIN].

The question was taken and the Chair announced that the noes appeared to have it.

Mr. BALDWIN. Mr. Chairman, I demand tellers.

Tellers were ordered and the Chair appointed as tellers Mr. DAVIS of Tennessee and Mr. BALDWIN.

The committee divided, and the tellers reported that there were—ayes 106, noes 109.

So the amendment was rejected.

Mr. SCHWENGEL. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. SCHWENGEL: On page 44, strike out line 24 and all that follows down through and including line 4 on page 45.

Mr. SCHWENGEL. Mr. Chairman, I think the intent of the amendment is clear. At the outset I want to remind you that a pretty strong plea was made down here on the floor that the committee system of the Congress was at stake. With this, I wholly agree. But, Mr. Chairman, more is at stake. It is the orderly procedure of the operation of this great legislative body and, maybe, freedom. This is something we had better think about and think pretty seriously about these days.

Mr. Chairman, the authorization of the China Gardens project on the Snake River, costing \$75 million, which is included in this bill, should be and can be deferred at this time without adverse effects. Let me underscore that: It can be postponed without any adverse effects.

Mr. Chairman, the China Gardens project is a companion project to the proposed \$257 million High Mountain Sheep project which is now before the Federal Power Commission for early decision. China Gardens would be operated in coordination with that project to produce power and reregulate the fluctuating water releases from the High Mountain Sheep project which is planned to be located immediately upstream.

China Gardens should be constructed and operated by the same entity that constructs High Mountain Sheep project.

Mr. Chairman, there is absolutely no justification for Federal construction of the China Gardens project which derives its benefits almost 100 percent from power. Listen, only two-tenths of 1 percent of its benefits are assigned to the other purposes, which is recreation.

Mr. Chairman, the Pacific Northwest Power Co., an outstanding electric utility, has a pending license application with the Federal Power Commission for the High Mountain Sheep project. Hearings on the High Mountain Sheep project have been completed before the Federal Power Commission and the decision as to a license should be forthcoming in the very near future. This company, I repeat, is competent, it is resourceful, and fully qualified in all respects to construct the China Gardens project.

Mr. Chairman, listen to this: This company has committed itself before the Senate Public Works Committee to build China Gardens if it receives a license to construct the High Mountain Sheep project.

Mr. Chairman, the construction of China Gardens by this company will eliminate a present drain on the Federal Treasury for \$75 million required

for its construction. And, in addition, listen, would pay taxes of over \$75 million in the next 50 years at the present rates and, of course, double that amount, or \$150 million, for the 100 years on which China Gardens is offered in the House report.

Mr. Chairman, this ought to be pretty seriously in the minds of the members of the committee as we consider this project. We ought to be able to see from this alone that the public interest is not being served here. This is just one of the things that will be testified to and proved beyond doubt before our committee, if we could have some hearings on it.

Mr. Chairman, should a license be denied by the Federal Power Commission for the construction of the High Mountain Sheep project, which is highly unlikely, then the Congress will have ample time at a future session to authorize China Gardens without adverse effects on the power supplied to this region.

China Gardens will not be needed for its primary operational purpose of re-regulation until High Mountain Sheep is constructed, and power from China Gardens will not be required until about 1970, nor will it be economic until that date.

The ratification by the Canadian Government of the treaty between Canada and the United States for flood control and power development in the Columbia River Basin, which is now imminent, will make available a large block of hydroelectric power. This power, plus the power that will be made available from the construction of the power facilities at the Hanford reactor which were recently authorized and the expected construction of other hydroelectric facilities, eliminates the need for the power from China Gardens until then.

I urge support of my amendment.

(Mr. SCHWENGEL asked and was given permission to revise and extend his remarks.)

Mrs. PFOST. Mr. Chairman, I rise in opposition to the amendment.

Mr. Chairman, I would like to call attention to the fact that this, again, is just another smokescreen thrown up by the private power trusts. This China Gardens project is a meritorious one. The authority for the review of this project was approved in 1955 by the Senate Public Works Committee. The project has a benefit-to-cost ratio of 1.7 to 1. Here, in this Army Corps of Engineers report, is a statement that the omission of the High Mountain Sheep project has only minor effect on the economic justification for the China Gardens project. It has been approved by the Departments of Interior, Agriculture, Commerce, HEW and the State of Idaho. The States of Washington and Oregon have no objection to it. Also, the Bureau of the Budget has no objection.

The project will cost, as the gentleman has said, \$74,777,000. It is a very important project in the Columbia River Basin system, of which the Snake River is a principal tributary. The China Gardens project is a relatively low-head dam and reservoir with an initial in-



stalled capacity of 180,000 kilowatts for the production of hydroelectric power. It will also provide recreation, which is an important industry in these times of shorter workweeks.

We must start development of our Columbia River Basin in Idaho, if we are to meet the needs of the people who will be moving into our great Northwest. These people will need power and the other facilities that will be brought about by development of such projects as those included in this rivers and harbors bill.

I certainly hope my distinguished colleagues will vote for the entire bill as it has been presented to the House today. The Idaho projects under bitter criticism should not be deleted from this important bill. All of them are important and are in accord with the President's message regarding the development of the Nation's natural resources.

Mr. CRAMER. Mr. Chairman, I can see no justification for Federal construction of the China Gardens project. A non-Federal body stands ready to build China Gardens and provide the same public benefits at no cost to the taxpayers. This non-Federal body is competent, resourceful, and fully qualified in all respects to build and operate this project.

China Gardens would function as a regulating dam for the High Mountain Sheep project upstream. The non-Federal entity has a pending license application with the Federal Power Commission for High Mountain Sheep and has committed itself in hearings before a Subcommittee of the Senate Public Works Committee to construct China Gardens if a license is issued to it for High Mountain Sheep. Hearings on High Mountain Sheep have been completed before the Federal Power Commission and the question as to a license should be resolved within a year. Should a license for High Mountain Sheep be denied to the non-Federal entity, this committee could then consider whether China Gardens should be authorized. Accordingly, nothing would be lost by postponing action on China Gardens.

The committee has heard absolutely no testimony from anyone—either public witnesses or the Corps of Engineers—upon this project which involves the expenditure of public funds of \$74 million. There are interests willing to build this project who have not been given an opportunity to appear and present their case. Certainly, if we as a committee are to perform our function, no projects should be authorized until full opportunity to present the issues of this committee have been afforded all interested parties, including the Corps of Army Engineers. To authorize this project under these circumstances seems to us to be reckless and unwarranted, particularly since the authorization of this project would deprive Federal, State, and local governments of taxes which would result from private development.

Mr. SCHWENGEL. Mr. Chairman, will the gentleman yield?

Mr. CRAMER. I yield to the gentleman from Iowa.

Mr. SCHWENGEL. There is testimony on record, and I think if we could

hear this project before our Committee we would find out that this could be proved, that is that the public-power interests envision the production of 180,000 kilowatts and the private-power interests envision the development of 300,000 kilowatts. This ought to be considered. This ought to be an important factor as you consider the whole project.

Mr. CRAMER. I think the public power advocates are determined to grab off this project here and now before private enterprise gets busy on High Mountain Sheep and prove they can do a better job with private funds than can be done with public funds. That is what is behind the whole thing. If that is done, it is going to affect the entire Columbia River Basin program, amounting to \$1.4 billion. That is what is involved. We need to strike thus out so we can prevent the Columbia River Basin project from being authorized without even holding public hearings.

The CHAIRMAN. The question is on the amendment offered by the gentleman from Iowa [Mr. SCHWENGEL].

Mr. SCHWENGEL. Mr. Chairman, on that I demand tellers.

Tellers were ordered, and the Chairman appointed as tellers Mr. SCHWENGEL and Mr. McFALL.

The Committee divided, and the tellers reported that there were—ayes 92, noes 104.

So the amendment was rejected.

Mr. HALEY. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, I take this time to direct my remarks to the chairman of the Committee on Public Works. We have in this Public Works bill on page 25, the so-called Green Swamp Region of Florida.

Mr. Chairman, this calls for an authorization of \$57,760,000 of Federal money with local participation to the extent of about \$42 million.

My complaint here today, Mr. Chairman, is this: This may be a good project. There may have been some slip-up in the committee in its communication, but I have in my congressional district, and a large part of this project is in my congressional district, a great many people who are violently opposed to this project. I had contacted the committee and asked that they be heard. They were not given that opportunity, Mr. Chairman, and I hope that before any appropriations are made—as a matter of fact, I would demand that before appropriations are being made or will be made on this project that the people in my congressional district who are going to be called on to expend \$42 million of their own money be given an opportunity to be heard. I would just like to say to the chairman of the Committee on Public Works that I realize it is not his fault, and I realize it is not the fault of other members of the committee that these people who oppose this project were not heard. But I do say this, that where the expenditure of nearly \$100 million is involved and where the expenditure of \$42 million of the people's money is involved, I think, Mr. Chairman, and do you not that they should have had an opportunity to be heard

inasmuch as they had requested to be heard?

Mr. DAVIS of Tennessee. Mr. Chairman, will the gentleman yield?

Mr. HALEY. I yield.

Mr. DAVIS of Tennessee. I am very sorry that this situation developed. The only thing I can promise the distinguished gentleman from Florida is that when you do go before the Appropriations Committee I shall be glad to go and state that there was a mistake in this matter.

Mr. HALEY. I thank the gentleman and yield back the balance of my time.

Mr. CRAMER. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. CRAMER: On page 4, strike out line 6 and all that follows down to and including line 12.

Mr. CRAMER. During debate on the bill, the gentleman from Florida [Mr. HALEY] commented on the Green Swamp region, Fla., project, which is partially in his district and also in mine and two other districts, as of 1963 as a result of the redistricting, and which, because of the tremendous damage done by floods in this area, I felt it essential to have put in the bill this year. I did not realize that it was controversial until it came up on the Senate side, with some witnesses appearing against a portion of the project, pursuant to which, the other body, in reporting its bill, S. 3773, included a proviso on page 30, lines 13 to 16, and I quote:

*And provided further, That planning and construction on the Lowery-Mattie Conservation Area and its appurtenant works is deferred until additional studies are made thereon, and a further report submitted to the Congress.*

Which protects the gentleman and his constituents and will give his constituents an opportunity to be heard at a future date. I can inform the gentleman that I expect to be appointed a conferee on the bill when the Senate acts and will give serious consideration to the inclusion of this proviso in the conference bill, yielding of course to the gentleman's concern on behalf of his constituents who desire to be heard. This is consistent with my position on the total bill, having stated that people should be entitled to be heard and controversial phases of the project should be eliminated.

Mr. Chairman, this is one of two amendments in the rivers and harbors section of the omnibus bill that are being offered for the reason that the projects do not conform to the basic ground rules which I believe are essential for the protection of the integrity of this bill, it being considered in the waning days of this Congress.

The ground rules that are being violated in these two projects are that they have not cleared the proper departmental agencies as is evidenced by the minority report, and I would call attention to page 238 of the report which sets out the procedures which Congress itself has said must be followed by our committee in considering projects. That is specifically provided in section 202 of the Rivers and Harbors Flood Control



Act of 1954 in which this Congress stated:

No project or any modification not authorized on a project for flood control or rivers and harbors shall be considered by the Congress unless the report on such project or modification has been previously submitted by the Chief of Engineers in conformity with existing law.

The project under discussion which this amendment will strike is the Port Elizabeth Channel maintenance project at an estimated cost of \$230,500 a year.

There is no politics in this; there was not any politics in the other two amendments offered. This is a question of basic fundamental what is right and what is wrong. When we consider this bill on this basis controversial projects should be left out, projects without proper reports should be left out, and that is what this project is. It does not have proper clearance from the proper agency. The report was not acceptable to the Board of Engineers. The report was not acceptable because it did not show the measurement under the benefit-to-cost ratio. The report was sent back to the District Engineers where it now lodges.

This means that the report has not been approved by the Board of Engineers, by the Chief of Engineers. It has not prepared the proposed report referred to as required by the law with the Board's report to the Governor of the affected States and other interested Federal agencies for comments and recommendations. Therefore, it is not properly, in my opinion, before our committee, should not have been acted on by our committee, and I am therefore moving that it be stricken.

I say again so far as I am concerned the position being taken by the minority on this bill is to protect the integrity of this bill an our committee in this Congress so that we cannot be subject to the charge of pork-barreling or showing favoritism. We must come up with a bill with physical projects on a meritorious basis.

As I say, there is no politics in this or in the other two motions. This happens to be in a Republican district, and I happen to believe Republicans and Democrats alike should live up to the ground rules. That is why I am offering this amendment to strike this particular project. I shall also offer an amendment covering the Jones Inlet proposition, and trust the amendment will be agreed to.

(Mr. CRAMER asked and was given permission to revise and extend his remarks on the pending amendment and the two previous amendments.)

Mr. McFALL. Mr. Chairman, I rise in opposition to the amendment offered by the gentleman from Florida [Mr. CRAMER]. This is a Newark Bay channel-making project and was thoroughly considered by the committee. It is sound and meritorious. It is not a matter of local controversy as were the other two large projects that were previously considered by the committee. It is merely a channel-making project involving \$230,500 a year. It is approved by the Corps of Engineers. They sent it up to

the Board of Rivers and Harbors and the Board of Rivers and Harbors found they included something in the cost-benefit ratio that should not have been included. They sent it back to the corps for a refiguring. We have received from the corps an informal statement by letter, stating that the cost-benefit ratio will be 2 to 1. In every way this is a sound and meritorious project. The committee gave it thorough consideration, and while the Bureau of the Budget has not had the opportunity to consider it we on this side feel, in spite of whatever technical objection may be made to it, that there is no controversy, it is sound and meritorious and should be accepted as part of the bill.

Mr. FULTON. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, I want to announce the wonderful news that astronaut Walter Schirra has just arrived safely on the *Kearsarge* carrier deck in the Pacific.

He is back safe and sound, and we are all thankful. Schirra's almost six orbits of the world today have been an outstanding U.S. space accomplishment.

Congratulations to our present U.S. team of seven astronauts, and the five successes to this time. Congratulations to the National Aeronautics and Space Agency under the leadership of Administrator James Webb. Congratulations to the House Committee on Science and Astronautics, of which I am proud to be a member, as well as to the Senate Space Committee, who have handled the legislative authority for these NASA Mercury man-in-space programs. Congratulations to Congressman ALBERT THOMAS, and his appropriations subcommittee on supplying the funds. President Kennedy and former President Eisenhower share in this high success of the Mercury man-in-space program.

We Americans can hold up our heads today in the real progress that has marked the Schirra remarkable orbit of the world.

The CHAIRMAN. The question is on the amendment offered by the gentleman from Florida [Mr. CRAMER].

The question was taken; and on a division (demanded by Mr. CRAMER) there were—ayes 67, noes 103.

So the amendment was rejected.

Mr. CRAMER. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. CRAMER: On page 12, strike out line 14 and all that follows, down to and including line 21.

Mr. CRAMER. Mr. Chairman, this involves Jones Inlet. It is becoming quite obvious that the House intends to go pork-barreling along its way. Therefore, I shall briefly discuss the project which is being objected to. It has no report of any kind from anybody, there is no way an estimate of cost can even be made.

Mr. Chairman, if the members of the committee will take a look at page 12 of the bill, the members will see that there is no estimate of the cost. There is no cost figure in the bill itself, which is the best indication of how bad a project it is from the standpoint of not properly being before the Congress.

Mr. Chairman, I hope the Congress will strike this project out and will support my amendment. But I repeat that it appears obvious that the House is going to merely pork-barrel its way along today. So, I will let it go at that.

Mr. PIKE. Mr. Chairman, I rise in opposition to the amendment.

(Mr. PIKE asked and was given permission to revise and extend his remarks.)

Mr. PIKE. Mr. Chairman, I shall try to be brief on this project. I did not intend to take the well of the House at all today. But I had an awful shock today when I heard the gentleman from Florida [Mr. CRAMER] earlier refer to this particular project as a "Republican" project. Mr. Chairman, I want to assure the gentleman from Florida that in opposing it he need not feel badly at all, because I want to guarantee the gentleman that this project begins at a place called "Democrat Point" on the west end of Fire Island, and it happens to be in the congressional district which I have the honor to represent.

Mr. CRAMER. If the gentleman will yield, I stand corrected.

Mr. PIKE. Mr. Chairman, I want to assure the gentleman from Florida also that this is a project which was brought up in a hurry, because there was a disaster in this area in March of this year.

The committee report says that continuing erosion of the protective and recreational beach in the study area has progressed in recent years to such an extent that use of the beach is impaired, and improvements to the shore front areas are damaged by storms and subject to possible destruction.

Mr. Chairman, it is not "possible destruction." We lost 100 homes in that district this year. This is an emergency project. There is not any opposition to it locally whatsoever, unlike other projects which we have discussed here. However, time is important in regard to this project. It cannot be postponed without adverse effects.

Mr. Chairman, a big point has been made of the fact that they cannot accurately at this time tell us the exact number of dollars which may be required subsequently in an appropriation bill. But I say to the members of this committee that if this project is not approved, if this amendment is agreed to, it is quite possible that the cost will be measured in lives and not in dollars.

Mr. Chairman, I ask that this amendment be defeated.

Mr. McFALL. Mr. Chairman, will the gentleman yield?

Mr. PIKE. I shall be glad to yield to the gentleman from California.

Mr. McFALL. I wish to associate myself with the statement made by the gentleman from New York, who is a member of the committee. I also want to say that as a member of the committee myself we agree with what the gentleman says. Many members of the committee have seen this emergency situation when we were in New York, and the committee feels that this is a much-needed and necessary project.

Mr. PIKE. In return, I will say that I am deeply grateful to the committee for



having been aware of the emergency and disaster nature of this operation up there. I am greatly appreciative of the fact that they have seen fit to recognize this emergency and do something about it.

Mr. EDMONDSON. Mr. Chairman, will the gentleman yield?

Mr. PIKE. I yield to the gentleman from Oklahoma.

Mr. EDMONDSON. Mr. Chairman, this is a project which many members of the committee have been to New York and looked at for ourselves. So, there are members of this committee who are personally acquainted with the situation.

Mr. PIKE. I am aware of the fact that the committee has studied it very thoroughly and I am delighted that the committee has seen fit to include it in this bill. I think it would be a great mistake to accept this amendment.

Mr. CRAMER. Mr. Chairman, will the gentleman yield?

Mr. PIKE. I shall be glad to yield to the gentleman from Florida.

Mr. CRAMER. I want to say to the gentleman that I too have been there. It is a beautiful beach—this Jones Beach—but I will say to the gentleman also that possibly the Engineers can come up with a good project. If it is a good one and is feasible, I shall be for it. But we do not know what it is. That is the problem. I understand the gentleman's problem, and I am sympathetic with it.

Mr. PIKE. The gentleman from Florida is saying because there was a storm up there and they had to revise some of their planning before, and they have not got their plans completed, what the gentleman is saying is because we have a lot of erosion up there, we cannot do anything about the erosion.

Mr. BECKER. Mr. Chairman, I rise in opposition to the amendment.

(Mr. BECKER asked and was given permission to revise and extend his remarks.)

Mr. BECKER. Mr. Chairman, I think most of the Members of the House know that this is my project, and has been so for several years. I worked a great many years in an effort to take care of the beach erosion at Jones Beach, caused by the silting of sand at the Fire Island Inlet.

Mr. Chairman, as our colleague has said, the gentleman from Oklahoma [Mr. EDMONDSON], he was up there and he viewed it and so did many other Members of the House Committee on Public Works come up and view the project.

I would like to make one little correction, however. In the course of this authorized project the first phase has already been completed. The Congress voted funds twice for the first phase of this project. It is not a change that is taking place now, because the Army Engineers and the State engineers in the beginning were coming up with a bypassing pumping process, and I hope this is what they are doing now. As a matter of fact, I am sure that is what they have in mind.

Mr. Chairman, I hope, because of the conditions there in that area in my district, as well as in the First Congress-

sional District, the committee will defeat this amendment so that the Engineers may proceed with the plans and get underway a permanent bypassing project in that area.

The CHAIRMAN. The question is on the amendment offered by the gentleman from Florida.

The amendment was rejected.

Mr. ROUSH. Mr. Chairman, I move to strike out the requisite number of words.

(Mr. ROUSH asked and was given permission to revise and extend his remarks.)

Mr. ROUSH. Mr. Chairman, I take the well of the House at this time, and hope the committee will be indulgent. A while ago we heard two of the giants of this House exchange words and become involved in a very forceful colloquy concerning the Indiana port. I regret very much that we do not have in this bill an authorization for the Indiana port. I have the highest regard for my colleague from Indiana [Mr. MADDEN]. In Indiana he is Mr. Democrat. And I have an equally high regard and respect for my colleague from Indiana [Mr. HALLECK]. In Indiana he is Mr. Republican. And because this powerful Democrat and this powerful Republican exchanged words on the floor of this House concerning this port, I fear there might be misunderstanding and that the Members of the House will think that this is a partisan issue. This is not so.

As much as I love my colleague [Mr. MADDEN], and respect him, I cannot stand with him on this issue. He stands alone in the Indiana delegation concerning our views on the Indiana port. He stands all alone. This has been a bipartisan or nonpartisan issue in Indiana for years and years and years.

My colleague from Indiana, the distinguished minority leader, referred to Henry F. Schricker. Mr. Schricker is perhaps the most beloved Democrat in the State of Indiana. He is for this port. The Governors who followed him, Governor Craig, and Governor Handley, Republicans, are for this port. At this moment there sits in the Governor's chair of Indiana a great Governor who has the backing of Hoosiers regardless whether they are Democrats or Republicans, regardless whether they represent big business or labor on this matter of an Indiana port.

You might ask, Well, why has not this port been authorized? Why has not the Bureau of the Budget seen fit to give its OK? I can say this: We have neighbors who are jealous of Indiana's intention to build a port. These people are trying to deprive us of this port because it will offer competition to another port on Lake Michigan. They are trying to build in Indiana a national park. We want a national park. But their plan includes this area where our port will be built, and we resent this interference in the affairs of Indiana on the part of our neighbor.

I tell you that when the distinguished minority leader said that we will not be foreclosed on this matter, he was not just talking. He was stating the truth for all of Indiana. Democrats and Re-

publicans alike will rise and fight for this port which justifiably belongs to our great State.

Mr. DORN. Mr. Chairman, I wish to thank my distinguished colleagues, the gentleman from New York [Mr. BUCKLEY], chairman of the committee; the gentleman from Tennessee, Judge DAVIS, chairman of the subcommittee; and each member of this great committee for doing the right thing by including H.R. 6789 in the omnibus rivers and harbors bill. I appreciate the consideration and fairness of the Rules Committee in granting a rule.

The people of my congressional district, the people of South Carolina, and yes, Mr. Chairman, the people of the entire southeastern section of the country are grateful for your sense of justice, your dedication to our traditional American opportunity system and your fairness to permit Duke Power Co. to move ahead without further delay.

This section—205—of the bill will permit Duke Power Co. to build a retaining dam across the Savannah River at Middleton Shoals between South Carolina and Georgia. This dam will enable Duke Power Co. to build the largest steamplant in the world in Anderson County in my congressional district. I introduced my bill, H.R. 6789, May 3, 1961. Since its introduction, the bill has been favorably approved by the Corps of Engineers, Department of the Army, and the Bureau of the Budget. Duke Power officials and engineers held many conferences with the Corps of Engineers to make this bill acceptable to all parties concerned. It was agreed that Duke would spend an additional \$1,300,000 to raise the level of its dam in order to make its operation compatible with any further development of the Savannah River in the future. I wish to commend the Corps of Engineers for their cooperation and foresight in approving this project.

Mr. Chairman, there is no opposition to the language in H.R. 6789. It is the same identical bill as passed by the 80th Congress which authorized Duke to build a dam and steamplant on Dan River between North Carolina and Virginia. Mr. Chairman, I might add that section 205 of this bill is the same as that in H.R. 6789. Since the day the bill was introduced, over 17 months ago, I have not received one telephone call, nor one letter, nor one telegram from anyone in the United States opposing the bill. This authorization is in keeping with the President's program to get the economy moving. The construction of this gigantic steamplant, estimated to cost approximately \$280 million, and possibly \$300 million, will be of tremendous help to the unemployed coal miners of Virginia, West Virginia, Kentucky, Pennsylvania, and throughout the East. This bill is a positive answer to the unemployment problem by creating more jobs and larger payrolls. It will provide more cheap power and will thus encourage many new industries. It will be a shot in the arm for our depressed railroads.

Mr. Chairman, we need to move forward to meet our defense program. A great plant such as the one proposed by



Duke with its fantastic abundance of cheap power will aid defense and will boost our economy. America must grow. This plant will point the way in the South.

The Duke Power Co. typifies the ideal, modern, progressive, philanthropic business corporation. Duke Power Co.'s wages and working conditions are second to none. The Duke Hospital with its charity, research, and philanthropy is known and admired throughout the world. Duke University is making its contribution in the desperate struggle with our enemies to win the cold war in the field of education. The President and leaders of this great company believe in progress.

They are dedicated to humanitarianism and they have a firm belief in the future of the United States.

Mr. Chairman, Duke Power Co. would spend approximately \$300 million to build this gigantic project. The steam-plant would consume \$26 million of coal annually from the Nation's depressed coal mines. It would help the depressed railroads by their hauling 9,500 tons of coal daily to the plant. It would pay to the Federal Government annually approximately \$10 million in taxes. It would pay to the State of South Carolina approximately \$7 million annually in taxes. It would pay Anderson County—largest in my district—approximately \$1 million annually in taxes, and it borders on a depressed area and is in line, may I say again, with the President's program to get the economy moving.

Mr. Chairman, may I repeat to emphasize that this is a taxpaying project of fantastic proportions. We must continue to encourage the construction and expansion of taxpaying enterprises if we are to balance our Federal budget and provide for the working people of America and the consumer, a sound, stable dollar.

Mr. Chairman, we must move the wheels of progress forward. We must keep turning forward the clock of economic progress and development. This bill authorizing this great project will inaugurate the dawn of a new day in the South. I know this section of the bill will have the unanimous approval of the House and the other body.

Mr. ASHBROOK. Mr. Chairman, I wish to thank the Committee on Public Works for their consideration of my district in including for authorization of \$2,438,000 for the very important Kokosing River project in the omnibus bill H.R. 13273. Time is of the essence and I am glad that we are today taking this forward step. Coming as it does, at the very close of the session of Congress it is my sincere hope that this project—indeed, this whole bill—will not be pigeonholed in our rush for adjournment. The people of my district were stunned by the January 1959 flood which devastated many areas but none harder than the city of Mount Vernon, Ohio. We have witnessed the expeditious handling of this flood protection project by the Corps of Engineers but at that almost 3 years have elapsed. The 3 years seems like a long time and yet by most standards in these matters, it has been very rapid.

It has been impossible to secure any quicker action on this project because this is the first—and only—authorization bill of the 87th Congress. If this bill passes, we then face the task of securing the funds to forthrightly proceed in this important matter. The Corps of Engineers has already informed me that their overall capabilities will be for \$75,000 to initiate preconstruction planning of the North Branch Kokosing River Reservoir and an amount of \$110,000 to initiate and complete preconstruction, snagging and clearing on the Kokosing River in Mount Vernon. If this bill passes and is enacted into law, I will immediately request these funds. Up to now it has been a matter of surveying the needs and making the plans; now we are down to the real heart of the matter and that is the actual construction of the flood control system. I might say also that there has been a fine cooperative effort in securing this authorization. Local committees and citizens, officials in Knox County and the city of Mount Vernon, have been able partners in the promotion of this much needed flood control system.

I limit my remarks to the status of the study of the Kokosing River Basin, but as a matter of information there are at the present time three authorized studies in various stages of completion in my seven-county district. Each of these projects cover flood control and allied purposes, including water supply, pollution abatement and recreation for the following watersheds: Licking River, Clear Fork and Rocky Fork, and the Scioto River.

At the outset, let me remind this committee that the district I am privileged to represent was one of the hardest hit in the January 1959 flood which caused such havoc in many areas of our Nation. The people of this area appreciate the considerate treatment they have already received by this committee in expeditiously appropriating funds for these worthy projects which are so ably administered by the Corps of Engineers. However, without appearing ungrateful, or unappreciative of these fine efforts, I must frankly state that the proposals in the Kokosing project are of the greatest necessity in affording proper flood protection for the citizens in the Kokosing River Basin and for their property.

Your committee has already received a great amount of testimony regarding the extent of flood damage to this area. The passage of over 3 years, of course, tends to dim the memory of this event and the hardships it imposed on so many of our citizens. The Kokosing and its tributaries in Mount Vernon, Fredericktown, and surrounding rural areas during the January 1959 flood inflicted damages totaling 5,300,000. The destruction occurred, primarily, to individual private properties and business establishments. This river basin has a serious history of extensive flooding dating as far back as 1932 with the more destructive ones occurring in 1913 and 1959. The January 1959 flood had a water runoff, above Mount Vernon, amounting to 5.2 inches which resulted in the highest cresting in history for the Kokosing

River Basin. The record demonstrates that flooding is not restricted to any season, but that floods may occur in any month of the year. This recorded history of flood frequency and damages clearly illustrate the urgent need for immediate flood preventive measures.

The city of Mount Vernon and the village of Fredericktown are the major municipal areas in the river basin where the potential flood hazard is of extreme concern. Rural areas above and below Mount Vernon are also subject to flooding and would substantially benefit for the improvements.

Following the record 1959 flood the Corps of Engineers conducted a detailed damage survey based on a house-to-house canvass of the flooded areas. All tangible flood damages were placed on a monetary value. Physical damages included direct damages to buildings or parts thereof, and loss of damage to contents. Emergency costs, such as flood fighting, evacuation of families, and emergency restoration of damaged flood protection facilities were estimated conservatively because of the difficulty in estimating the thousands of man-hours donated by the residents of the area. This evidence more than substantiates the above-mentioned damage estimates and realistically illustrates the necessity for funding this program.

The Corps of Engineers has indicated the necessity of commencing this project as soon as possible, indirectly, by demonstrating the fact that June 1959 Federal costs of the North Branch Reservoir were estimated at \$2,334,000 and by July 1961 these costs had increased by their estimate to \$2,520,000. A substantial cost savings to the taxpayers will be afforded by expeditiously commencing work on this project.

The intangible damage, those that could not be given any monetary value, are very real and must be recognized. The principal intangible damage that merits discussion is the high probability of loss of life that exists at Mount Vernon in the event of the present levee overtopping at night. There are approximately 650 homes that are located in the flood plains of the Kokosing River behind the existing levee. First floor elevations of these homes vary from 2 to as much as 8 feet below the top of the protective levee. On January 21, 1959, the levee was overtopped early in the afternoon. Actual evacuation of most of the area was not started until after the levee failed, and even at this time was carried out under hazardous conditions. Had the overtopping and subsequent failure of the levee occurred late at night it is highly probable that loss of life by drowning or exposure would have reached disastrous proportions, and also, very probable that movable property evacuation would have proceeded at a much slower, thereby increasing the losses.

At this point I would like to elaborate on a quote taken from the report submitted by the Board of Engineers for Rivers and Harbors:

An accurate forecast of the future trend of development for the Kokosing River Basin is extremely difficult to develop. For this reason a conservative approach to this phase



of damage and benefit evaluation has been adopted.

Even though the Corps of Engineers issued a relatively conservative analysis report the strategic location of the city of Mount Vernon and the rate of future growth predicted for the Kokosing River Basin and the inevitable extensive expansion in the use of lands in the flood plains, in my opinion, more than vindicate the approval of this project. In fact, the projected future growth of this area in the next 50 years is 100 percent.

As has been earlier stated, the Kokosing River Basin has an extensive history of flood problems which naturally has been long recognized by the local residents as evidenced by the efforts put forth, locally, on projects to curb flooding. Following the 1898 flood the people of Mount Vernon constructed a levee system that provided partial protection. This levee was destroyed by the 1913 flood and subsequently was rebuilt. The levee was again overtopped and partially destroyed by the 1959 flood.

Soon after the 1959 flood, local interest at Fredericktown, Mount Vernon, and affected rural areas throughout the basin again demonstrated their intense interest by working with the Corps of Engineers, U.S. Soil Conservation Service, Ohio Department of Natural Resources, and the Muskingum Watershed Conservancy District in designing and promoting concrete actions for attacking the flood menace. As a result of these fine efforts and extensive studies by the Corps of Engineers two separate and distinct plans were selected and recommended to make up the project plan for the Kokosing River Basin. This combination of projects, the North Branch Reservoir and the snagging and clearing of the Kokosing at Mount Vernon, will have widespread benefits throughout the most densely populated reaches of the basin. The two plans will, respectfully, provide virtually complete protection at Fredericktown and would prevent overtopping of the existing levee at Mount Vernon on the basis of the record January 1959 flood and will virtually eliminate damages from all floods having an estimated frequency of recurrence in the order of 100 years.

In addition, the construction of the proposed North Branch project will greatly enhance the net flood control in the Mohawk Reservoir which is a key link in the 14 reservoir Muskingum River Reservoir system.

Both the North Branch Reservoir and the snagging and clearing project at Mount Vernon show a favorable justification. Based on an incremental analysis, the two projects together have a favorable overall benefit-cost ratio of 1.3 to 1. Even though the snagging and clearing project at Mount Vernon has a higher benefit-cost ratio than the North Branch Reservoir, it is not recommended that the Mount Vernon project precede the North Branch Reservoir since it would create a false sense of security among the citizens of Mount Vernon.

The U.S. Fish and Wildlife Service reports that the proposed projects would

have no significant effect on the fish and wildlife resources in the Kokosing River Basin.

The U.S. Public Health Service investigated the need for water supply and pollution abatement and reported that there will be no need for such storage in the foreseeable future.

In conclusion, I sincerely urge that the House approve this request so that the future of the citizens of the Kokosing River Basin can be secure from floods that have plagued them with damages amounting to millions of dollars over a short period of years.

Mr. JOELSON. Mr. Chairman, I fail to see the need for such a rush to enact this tremendous "pork barrel" in the waning days of this session. Certainly the appropriation cannot be made this year.

I am not convinced that the many projects which the bill would authorize are essential. They might be desirable in times of less economic demands upon our national budget, but these are unusual times. We simply cannot spend for every project suggested. I am opposed to this measure, H.R. 13273.

Mr. HALPERN. Mr. Chairman, there is a specific item in this bill before us which is of particular interest to the people of my district. I refer to the \$2,185,000 Federal appropriation to improve and reclaim Little Neck Bay, which is on the westerly end of Long Island Sound about 17 miles northeast of the Battery, New York City.

The Corps of Army Engineers is to be heartily commended for its thorough survey, a vital undertaking which I recommended to this House in 1959.

The item to which I refer is contained in this bill as a result of this survey. It has been fully approved by the Department of the Interior, the Department of Health, Education, and Welfare, and the State of New York. The Bureau of the Budget has voiced no objection to the appropriation.

The envisioned plan calls for dredging an entrance channel 200 feet wide and 7 feet deep from Long Island Sound, to expanded anchorage facilities covering an area of 350 acres which would also be dredged to a 7-foot depth.

This proposed dredging would rid Little Neck Bay of unsightly, drifting mudbanks, removing the difficulties which have arisen from insufficient depth in the southerly part of the bay causing craft to moor in less sheltered areas—a condition which has plagued boaters for years. But, beyond this hazard, the deteriorating conditions has been a direct jeopardy to the health and property valuation of local residents.

At the same time the dredging operation is underway, it would be a tremendous community improvement to have a 3000 foot seawall constructed along the western shore of the bay, so that the 2 million cubic yards of fill which the dredging will yield—could be utilized in areas, playgrounds, and parking facilities. It is estimated that such a wall would cost not more than \$375,000. This certainly would be money well spent. A portion of this fill could also be used

for the planned extension of Alley Pond Park, and for the construction of a public marina—a real bonus to the community.

I wish the story had its happy ending here. But, there is still more to be done. The action here today, which I trust will be sustained by the Senate and approved by the President, is not, unfortunately, the complete fruition of the objective. It is, however, a long-sought start and an essential one.

The next step is for the State to match the Federal funds. There seems to be no State provision for providing moneys for such a purpose and legislation to correct this situation continually faces jurisdictional conflict. There have been some difficult hurdles, and I trust they will be overcome.

An answer to this problem—not only for Little Neck Bay, but for all similar situations throughout the country—can be found by applying funds derived from marine fuel taxes that now go to the highway trust fund for this purpose. My bill, H.R. 12890, would transfer to the several States the money being held in reserve by the Federal Government in the highway trust fund, and would require the States to earmark the money for the improvement of boating facilities. I call this legislation to the attention of my colleagues and enlist their support in its behalf.

All we seek, Mr. Chairman, is that the unclaimed and unrefunded portion of the fund be allocated for the sole purpose of improving boating facilities and improving harbors. After all, it is the use of the marine craft that produced this portion of the fund. It is no more than equitable then that it should be applied toward the improvement of the navigable waterways which will benefit the boat users who pay the tax in the first place.

This fund, Mr. Speaker, is now estimated to total some \$13 million. It has been accumulated from the unrefunded 2-cent portion of the Federal taxes collected on sales of marine fuels.

My bill would appropriate to each State its pro rata share of this fund. New York's portion should more than take care of the matching funds it needs for its contribution to such projects as the one planned for Little Neck Bay.

The very establishment of the trust fund attests to the fact that the Federal Government intended to hold this money in reserve for boatmen. While some have received a refund of 2 cents for each gallon of marine gasoline they buy, the refund procedure is so complicated that it becomes impossible for the average operator of a small open boat to keep the records necessary to apply for a refund.

In a very real sense these funds are owed to these very boatmen and should be used for their benefit. It is tragic that this situation continues to exist while at the same time worthwhile and desired harbor improvement projects are prevented from going ahead because of lack of funds locally. It is only fitting that the trust fund be returned to the States in the proportion of their contributions to it, and that these monies be



used for harbor improvement. My bill is intended to do just that.

And, Mr. Speaker, to realize the side-benefits to which I referred earlier, we must look to New York's City Hall. It would be a shame, Mr. Chairman, if these side benefits which cost so little do not become a part of the overall plans. Surely, few projects are able to harvest such varied and desirable benefits for the over 1 million residents of the area surrounding Little Neck Bay.

Mr. Chairman, again let me say that few projects offer such desirable residual advantages to all concerned. As I stated, the project will make possible new playgrounds, parking facilities, waterfront recreational areas, and a park extension. Thus, the improvement of Little Neck Bay would not only be of a tremendous benefit to the many boatmen who use it and would provide a safer harbor of refuge—but would also make possible new recreational facilities, eliminate health fears and improve the property valuation of the many residents of the area.

Mr. Chairman, this bill fulfills an objective we in Queens and Nassau counties have sought for a long time. I urge my colleagues to join me in giving it their fullest support.

Mr. SCHADEBERG. Mr. Chairman, it is with a deep sense of pride that I speak of the efforts of the city of Kenosha, Wis., and the dedicated cooperation of business firms and private citizens of Kenosha to create an international port of entry from a small natural harbor used by fishing boats and pleasure craft.

The impossible was accomplished. Kenosha, Wis., has been designated an international port of entry. The city spent \$750,000 for land acquisition, construction of warehouse facilities, and dredging to make the port of Kenosha inviting to foreign ships using the St. Lawrence Seaway. A private concern, the Endee Co., spent \$1.5 million to improve facilities for the expected business of the St. Lawrence Seaway.

Year 1961 was a good year for the Kenosha port—1962 was even better. By the end of August 1962, 68 ships used of the port of Kenosha, compared with 38 by the end of August 1961. A total of 76 foreign ships called at the Kenosha port during 1961, compared to 4 in 1958, and about 50,000 tons of import and export cargo were handled, compared to 953 tons in 1958—the opening season of the St. Lawrence Seaway. The port of Kenosha handles the overseas shipment of Rambler automobiles made in Kenosha, feed grains, flour, lard and tallow, and military cargo.

Ships using the St. Lawrence Seaway are larger and loading heavier than in the past and lake ports must be deepened to accommodate the ships using the seaway, if the seaway is to be utilized to the full extent of its promise.

Recently the heavily laden Swiss freighter *Castagnola* ran aground at the entrance to the Kenosha Harbor. An all-night battle against heavy seas and a 40-mile-an-hour northeast wind which trapped the ship ended with its rescue from being smashed against the south

pier, but unable to proceed. The *Castagnola*, which ran aground on a sandbar at the mouth of the harbor channel, was literally dragged through the sand back to the protection of the harbor, after 14 hours and 35 minutes of combined effort by the Coast Guard and private tugs. The *Castagnola* was grounded on mud and sand. This condition will be improved by deepening the entrance and approach channels as recommended by the Army Engineers.

The Corps of Engineers has recommended a \$673,000 dredging project to deepen the Kenosha port to a depth of 25 feet to correspond with the depth of the St. Lawrence Seaway. The Kenosha Harbor project is included in H.R. 13273, the omnibus rivers and harbors and flood control bill and I respectfully ask for the favorable consideration of the House to this measure.

Mr. ROBISON. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, I take this time merely to announce to the House that at the appropriate moment I intend to offer a motion to recommit with instructions to strike the Burns Creek project.

Mr. GROSS. Mr. Chairman, I move to strike out the requisite number of words.

Mr. Chairman, I thought yesterday when the \$10 million fishbowl was passed I heard the jingle of sleigh bells. With this \$2,300 million "pork" bill this afternoon I hear them all over the place. I want to wish all of you a merry Christmas.

The SPEAKER. Under the rule, the Committee rises.

Accordingly, the Committee rose; and the Speaker having resumed the chair, Mr. WALTER, Chairman of the Committee of the Whole House on the State of the Union, reported that that Committee having had under consideration the bill (H.R. 13273) authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes, pursuant to House Resolution 823, he reported the bill back to the House with sundry amendments adopted by the Committee of the Whole.

The SPEAKER. Under the rule, the previous question is ordered.

Is a separate vote demanded on any amendment? If not, the Chair will put them en gros.

The amendments were agreed to.

The SPEAKER. The question is on the engrossment and third reading of the bill.

The bill was ordered to be engrossed and read a third time, and was read the third time.

Mr. ROBISON. Mr. Speaker, I offer a motion to recommit.

The SPEAKER. Is the gentleman opposed to the bill?

Mr. ROBISON. I am, Mr. Speaker.

The SPEAKER. The gentleman qualifies. The Clerk will report the motion to recommit.

The Clerk read as follows:

Mr. ROBISON moves to recommit the bill, H.R. 13273, to the House Committee on Public Works with instructions to report the bill back to the House forthwith with the

following amendment: On page 44, delete all the words on lines 4 through 8.

The SPEAKER. Without objection, the previous question is ordered.

There was no objection.

The SPEAKER. The question is on the motion to recommit.

Mr. ROBISON. On that, Mr. Speaker, I demand the yeas and nays.

The yeas and nays were ordered.

The question was taken; and there were—yeas 203, nays 130, answered "present" 1, not voting 102, as follows:

[Roll No. 269]

YEAS—203

Abbott	Durno	Morgan
Abernethy	Dwyer	Morse
Addabbo	Elliott	Mosher
Alford	Ellsworth	Murray
Alger	Fascell	Nelsen
Andersen,	Feighan	Norblad
Minn.	Fenton	Nygaard
Andrews	Findley	O'Brien, N.Y.
Arends	Fino	Osmer
Ashbrook	Fisher	Ostertag
Ashmore	Ford	Passman
Auchincloss	Fountain	Patman
Avery	Frelinghuysen	Pelly
Ayres	Fulton	Perkins
Bailey	Garland	Philbin
Baldwin	Gary	Pillion
Barry	Gathings	Pirnie
Bass, N.H.	Gavin	Poff
Bates	Gialmo	Pucinski
Battin	Grant	Randall
Becker	Gray	Ray
Beckworth	Griffin	Reece
Beermann	Gross	Rhodes, Ariz.
Betts	Gubser	Rhodes, Pa.
Boland	Haley	Riehlman
Bolton	Halleck	Rivers, S.C.
Bonner	Hardy	Roberts, Tex.
Bow	Harrison, Wyo.	Robison
Bray	Harsha	Rogers, Fla.
Bromwell	Harvey, Mich.	Rutherford
Broomfield	Henderson	St. George
Broyhill	Hoffman, Ill.	St. Germain
Bruce	Horan	Saylor
Burke, Mass.	Hosmer	Schadeberg
Burleson	Huddleston	Schenck
Byrnes, Wis.	Hull	Schneebell
Cahill	Jarman	Schweiker
Carey	Jennings	Schwengel
Casey	Jensen	Scott
Cederberg	Joelson	Selden
Chamberlain	Johansen	Shriver
Chenoweth	Jonas	Sibal
Church	Keith	Sikes
Clancy	Kilgore	Slack
Clark	Kling, N.Y.	Smith, Calif.
Collier	Kitchin	Smith, Va.
Colmer	Knox	Stafford
Conte	Kornegay	Staggers
Cook	Kunkel	Stratton
Cooley	Kyl	Taylor
Corbett	Lane	Teague, Calif.
Cramer	Langen	Teague, Tex.
Cunningham	Latta	Thomson, Wis.
Curtis, Mass.	Lennon	Tuck
Curtis, Mo.	Lipscomb	Vanik
Daddario	McCulloch	Waggonner
Dague	McVey	Wallhauser
Davis,	Mahon	Walter
James C.	Mailliard	Westland
Denton	Martin, Nebr.	Wharton
Derounian	Mathias	Whitener
Derwinski	Matthews	Whitten
Devine	Meador	Widnall
Dole	Miller, N.Y.	Wilson, Calif.
Donohue	Milliken	Wilson, Ind.
Dowdy	Minshall	Winstead
Downing	Monagan	Young
Dulski	Moore	Younger

NAYS—130

Albert	Chelf	Flood
Ashley	Cohelan	Flynt
Baker	Corman	Forrester
Baring	Daniels	Friedel
Barrett	Davis, Tenn.	Gallagher
Bass, Tenn.	Dawson	Garmatz
Bennett, Fla.	Delaney	Gilbert
Blatnik	Dingell	Gonzalez
Boggs	Dorn	Granahan
Brademas	Doyle	Green, Oreg.
Brooks, Tex.	Edmondson	Green, Pa.
Buckley	Everett	Hagan, Ga.
Byrne, Pa.	Farbstein	Hagen, Calif.
Celler	Finnegan	Halpern



Harding	Morrow	Rosenthal
Healey	Mills	Rostenkowski
Hechler	Montoya	Roush
Hemphill	Moorhead, Pa.	Ryan, Mich.
Hollifield	Morris	Ryan, N.Y.
Ichord, Mo.	Morrison	Santangelo
Inouye	Moss	Shelley
Johnson, Calif.	Multer	Sisk
Johnson, Md.	Murphy	Smith, Iowa
Johnson, Wis.	Natcher	Smith, Miss.
Jones, Ala.	Nedzi	Steed
Karsten	Nix	Stephens
Kastenmeier	O'Hara, Ill.	Stubblefield
Kearns	O'Hara, Mich.	Sullivan
Kelly	Olsen	Thomas
Keogh	O'Neill	Thompson, N.J.
King, Calif.	Pfost	Thompson, Tex.
King, Utah	Pike	Toll
Kluczynski	Pilcher	Tollefson
Landrum	Poage	Trimble
Lankford	Powell	Tupper
Lesinski	Price	Udall, Morris K.
Libonati	Purcell	Weaver
Loser	Reuss	Wickersham
McFall	Riley	Willis
Macdonald	Rivers, Alaska	Wright
Mack	Roberts, Ala.	Yates
Madden	Rodino	Zablocki
Marshall	Rogers, Colo.	
May	Rooney	

## ANSWERED "PRESENT"—1

Fallon

## NOT VOTING—102

Adair	Harrison, Va.	Norrell
Alexander	Harvey, Ind.	O'Brien, Ill.
Anderson, Ill.	Hays	O'Konski
Anfuso	Hébert	Peterson
Aspinall	Herlong	Quile
Belcher	Hiestand	Rains
Bell	Hoeven	Reifel
Bennett, Mich.	Hoffman, Mich.	Rogers, Tex.
Berry	Holland	Roosevelt
Blitch	Jones, Mo.	Roudebush
Bolling	Judd	Rousselot
Boykin	Karth	Saund
Breeding	Kee	Scherer
Brewster	Kilburn	Scranton
Brown	Kirwan	Seely-Brown
Burke, Ky.	Kowalski	Sheppard
Cannon	Laird	Shipley
Chiperfield	Lindsay	Short
Coad	McDonough	Siler
Curtin	McDowell	Spence
Davis, John W.	McIntire	Springer
Dent	McMillan	Taber
Diggs	McSween	Thompson, La.
Dominick	MacGregor	Thornberry
Dooley	Magnuson	Ullman
Evins	Martin, Mass.	Utt
Fogarty	Mason	Van Pelt
Frazier	Michel	Van Zandt
Glenn	Miller, Clem	Vinson
Goodell	Miller,	Watts
Goodling	George P.	Weis
Griffiths	Moeller	Whalley
Hall	Moorehead,	Williams
Hansen	Ohio	Zelenko
Harris	Moulder	

So the motion to recommit was agreed to.

The Clerk announced the following pairs:

On this vote:

Mr. Fallon for, with Mr. Ullman against.  
 Mr. Dent for, with Mr. Hébert against.  
 Mr. Holland for, with Mr. Thompson of Louisiana against.  
 Mr. Bell for, with Mr. George P. Miller against.  
 Mr. Laird for, with Mr. Shipley against.  
 Mr. Martin of Massachusetts for, with Mr. Anfuso against.  
 Mr. Williams for, with Mr. Roosevelt against.  
 Mr. Glenn for, with Mr. Sheppard against.  
 Mr. Goodling for, with Mr. Clem Miller against.  
 Mr. MacGregor for, with Mr. Frazier against.  
 Mr. Hiestand for, with Mr. Peterson against.  
 Mr. Rousselot for, with Mr. O'Brien of Illinois against.  
 Mr. Utt for, with Mr. Magnuson against.  
 Mr. Taber for, with Mr. Kirwan against.  
 Mr. Scherer for, with Mr. Brewster against.

Mr. Lindsay for, with Mr. Moeller against.  
 Mrs. Kee for, with Mr. Zelenko against.  
 Mr. Seely-Brown for, with Mrs. Hansen against.

Mr. Hoeven for, with Mr. Diggs against.  
 Mr. Alexander for, with Mr. John W. Davis against.

Mr. Goodell for, with Mr. Aspinall against.  
 Mr. Brown for, with Mr. Breeding against.  
 Mr. Quile for, with Mrs. Griffiths against.  
 Mr. Judd for, with Mr. Spence against.  
 Mr. Short for, with Mr. Karth against.  
 Mr. Roudebush for, with Mr. Hays against.  
 Mr. Michel for, with Mr. Coad against.

## Until further notice:

Mr. Evins with Mr. Anderson of Illinois.  
 Mr. Burke of Kentucky with Mr. Scranton.  
 Mr. Thornberry with Mr. O'Konski.  
 Mr. Rogers of Texas with Mr. Kilburn.  
 Mr. Rains with Mr. Hall.  
 Mr. Watts with Mr. Reifel.  
 Mr. Vinson with Mr. McDonough.  
 Mr. Fogarty with Mr. Siler.  
 Mr. Harris with Mr. Berry.  
 Mr. Harrison of Virginia with Mr. Adair.  
 Mr. Herlong with Mr. Curtis.  
 Mr. McMillan with Mr. Dominick.  
 Mr. Kowalski with Mr. Moorehead of Ohio.  
 Mr. McSween with Mr. Bennett of Michigan.

Mrs. Norrell with Mr. Springer.  
 Mr. Moulder with Mr. Van Pelt.  
 Mr. McDowell with Mr. McIntire.  
 Mr. Saund with Mr. Harvey of Indiana.  
 Mrs. Blitch with Mr. Belcher.

Mr. FALLON. Mr. Speaker, I have a live pair with the gentleman from Oregon, Mr. ULLMAN. Had he been present, he would have voted "nay." I voted "yea." Therefore, I withdraw my vote and vote "present."

Messrs. JARMAN, PERKINS, ROBERTS of Texas, WALTER, ELLIOTT, BONNER, FASCELL, ST. GERMAIN, LANE, PHILBIN, DONOHUE, and RANDALL changed their vote from "nay" to "yea."

The result of the vote was announced as above recorded.

Mr. DAVIS of Tennessee. Mr. Speaker, pursuant to the instructions of the House, I report the bill H.R. 13273 back to the House with an amendment which is at the Clerk's desk.

The SPEAKER. The Clerk will report the amendment.

The Clerk read as follows:

On page 44, delete all the words on lines 4 through 8.

The amendment was agreed to.

The SPEAKER. The question is on the engrossment and third reading of the bill.

The bill was ordered to be engrossed and read a third time, and was read the third time.

The SPEAKER. The question is on the passage of the bill.

Mr. LATTA. On this vote, Mr. Speaker, I demand the yeas and nays. The yeas and nays were refused.

The bill was passed.

A motion to reconsider was laid on the table.

Mr. DAVIS of Tennessee. Mr. Speaker, I ask unanimous consent that the Clerk be authorized to adjust indexes, cross-references, and numbers of sections in the bill just passed.

The SPEAKER. Is there objection to the request of the gentleman from Tennessee?

There was no objection.

Mr. DAVIS of Tennessee. Mr. Speaker, I ask unanimous consent that all Members desiring to do so may have 5 legislative days in which to extend their remarks in the RECORD on the bill just passed.

The SPEAKER. Is there objection to the request of the gentleman from Tennessee?

There was no objection.

## FURTHER MESSAGE FROM THE SENATE

A further message from the Senate by Mr. McGown, one of its clerks, announced that the Senate had passed without amendment a bill of the House of the following title:

H.R. 9491. An act to provide for the removal of an encumbrance on the title of certain real property heretofore conveyed to the Board of Education of the Vallejo School District, Vallejo, Calif., by the U.S. Housing Corporation.

The message also announced that the Senate had passed with amendments, in which the concurrence of the House is requested, a bill of the House of the following title:

H.R. 12580. An act making appropriations for the Departments of State, Justice, and Commerce, the Judiciary, and related agencies for the fiscal year ending June 30, 1963, and for other purposes.

The message also announced that the Senate insists upon its amendments to the foregoing bill, requests a conference with the House on the disagreeing votes of the two Houses thereon, and appoints Mr. McCLELLAN, Mr. ELLENDER, Mr. HAYDEN, Mr. HOLLAND, Mr. FULBRIGHT, Mr. MANSFIELD, Mrs. SMITH of Maine, Mr. SALTONSTALL, Mr. MUNDT, and Mr. HRUSKA to be the conferees on the part of the Senate.

The message also announced that the Senate agrees to the amendments of the House to a bill of the Senate of the following title:

S. 962. An act to amend the Federal Aviation Act of 1958, as amended, to aid the Civil Aeronautics Board in the investigation of aircraft accidents, and for other purposes.

The message also announced that the Senate agrees to the report of the committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H.R. 7927) entitled "An act to adjust postal rates, and for other purposes."

The message also announced that the Senate agrees to the report of the committee of conference on the disagreeing votes of the two Houses on the amendments of the House to the bill (S. 901) entitled "An act to advance the marine sciences, to establish a comprehensive 10-year program of oceanographic research and surveys, to promote commerce and navigation, to secure the national defense, to expand ocean, coastal, and Great Lakes resources, to authorize the construction of research and survey ships and laboratory facilities, to expedite oceanographic instrumentation, to assure systematic studies of effects of radioactive materials in marine environ-



ments, to enhance the public health and general welfare, and for other purposes."

# DEPARTMENTS OF STATE, JUSTICE, AND COMMERCE, THE JUDICIARY, AND RELATED AGENCIES APPROPRIATION BILL, 1963

Mr. ROONEY. Mr. Speaker, I ask unanimous consent to take from the Speaker's table the bill H.R. 12580 making appropriations for the Departments of State, Justice, and Commerce, the Judiciary, and related agencies for the fiscal year ending June 30, 1963, and for other purposes with Senate amendments thereto, disagree to the Senate amendments, and agree to the conference asked by the Senate.

The SPEAKER. Is there objection? [After a pause.] The Chair hears none and appoints the following conferees: Messrs. ROONEY, SIKES, CANNON, BOWEN, and TABER.

## AMENDING AND SUPPLEMENTING THE LAWS WITH RESPECT TO MANUFACTURE AND DISTRIBUTION OF DRUGS

Mr. ROBERTS of Alabama submitted the following conference report and statement on the bill (S. 1552) to amend and supplement the laws with respect to the manufacture and distribution of drugs, and for other purposes:

### CONFERENCE REPORT (H. REPT. NO. 2526)

The committee of conference on the disagreeing votes of the two Houses on the amendments of the House to the bill (S. 1552) to amend and supplement the laws with respect to the manufacture and distribution of drugs, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the Senate recede from its disagreement to the amendment of the House to the text of the bill and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following: "That this Act, divided into titles and sections according to the following table of contents, may be cited as the 'Drug Amendments of 1962'."

#### TABLE OF CONTENTS

##### "Title I—Drugs

##### "Part A—Amendments To Assure Safety, Effectiveness, and Reliability

"Sec. 101. Requirement of adequate controls in manufacture.

"Sec. 102. Effectiveness and safety of new drugs.

"Sec. 103. Records and reports as to experience on new drugs.

"Sec. 104. New drug clearance procedure.

"Sec. 105. Certification of antibiotics.

"Sec. 106. Records and reports as to experience on antibiotics.

"Sec. 107. Effective dates and application of part A.

##### "Part B—Standardization of Drug Names

"Sec. 111. Review and designation of official names.

"Sec. 112. Name to be used on drug label.

"Sec. 113. Exclusion of cosmetics.

"Sec. 114. Information to physicians.

##### "Part C—Amendments as to Advertising

"Sec. 131. Prescription drug advertisements.

##### "Title II—Factory inspection and effect on State laws

"Sec. 201. Factory inspection.

"Sec. 202. Effect on State laws.

"Sec. 203. Effective date.

##### "Title III—Registration of drug establishments and patent information

"Sec. 301. Findings and declaration.

"Sec. 302. Registration of producers of drugs.

"Sec. 303. Transitional provisions.

"Sec. 304. Failure to register.

"Sec. 305. Drugs from nonregistered establishments misbranded.

"Sec. 306. Samples of imported drugs.

"Sec. 307. Definitions.

"Sec. 308. Information on patents for drugs.

##### "TITLE I—DRUGS

##### "Part A—Amendments to assure safety, effectiveness, and reliability

##### "Requirement of Adequate Controls in Manufacture

"SEC. 101. Clause (2) of section 501(a) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 351(a)) is amended to read as follows: "(2)(A) if it has been prepared, packed, or held under insanitary conditions whereby it may have been contaminated with filth, or whereby it may have been rendered injurious to health; or (B) if it is a drug and the methods used in, or the facilities or controls used for, its manufacture, processing, packing, or holding do not conform to or are not operated or administered in conformity with current good manufacturing practice to assure that such drug meets the requirements of this Act as to safety and has the identity and strength, and meets the quality and purity characteristics, which it purports or is represented to possess;."

##### "Effectiveness and Safety of New Drugs

"SEC. 102. (a) (1) Section 201(p) (1) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321(p) (1)), defining the term 'new drug', is amended by (A) inserting therein, immediately after the words 'to evaluate the safety', the words 'and effectiveness', and (B) inserting therein, immediately after the words 'as safe', the words 'and effective'.

"(2) Section 201(p) (2) of such Act (21 U.S.C. 321(p) (2)) is amended by inserting therein immediately after the word 'safety', the words 'and effectiveness'.

"(b) Section 505(b) of such Act (21 U.S.C. 355(b)) is amended by inserting therein, immediately after the words 'is safe for use', the words 'and whether such drug is effective in use'.

"(c) Section 505(d) of such Act (21 U.S.C. 355(d)) is amended to read as follows:

"(d) If the Secretary finds, after due notice to the applicant in accordance with subsection (c) and giving him an opportunity for a hearing, in accordance with said subsection, that (1) the investigations, reports of which are required to be submitted to the Secretary pursuant to subsection (b), do not include adequate tests by all methods reasonably applicable to show whether or not such drug is safe for use under the conditions prescribed, recommended, or suggested in the proposed labeling thereof; (2) the results of such tests show that such drug is unsafe for use under such conditions or do not show that such drug is safe for use under such conditions; (3) the methods used in, and the facilities and controls used for, the manufacture,

processing, and packing of such drug are inadequate to preserve its identity, strength, quality, and purity; (4) upon the basis of the information submitted to him as part of the application, or upon the basis of any other information before him with respect to such drug, he has insufficient information to determine whether such drug is safe for use under such conditions, or (5) evaluated on the basis of the information submitted to him as part of the application and any other information before him with respect to such drug, there is a lack of substantial evidence that the drug will have the effect it purports or is represented to have under the conditions of use prescribed, recommended, or suggested in the proposed labeling thereof; or (6) based on a fair evaluation of all material facts, such labeling is false or misleading in any particular; he shall issue an order refusing to approve the application. If, after such notice and opportunity for hearing, the Secretary finds that clauses (1) through (6) do not apply, he shall issue an order approving the application. As used in this subsection and subsection (e), the term 'substantial evidence' means evidence consisting of adequate and well-controlled investigations, including clinical investigations, by experts qualified by scientific training and experience to evaluate the effectiveness of the drug involved, on the basis of which it could fairly and responsibly be concluded by such experts that the drug will have the effect it purports or is represented to have under the conditions of use prescribed, recommended, or suggested in the labeling or proposed labeling thereof."

"(d) Section 505(e) of such Act (21 U.S.C. 355(e)) is amended to read as follows:

"(e) The Secretary shall, after due notice and opportunity for hearing to the applicant, withdraw approval of an application with respect to any drug under this section if the Secretary finds (1) that clinical or other experience, tests, or other scientific data show that such drug is unsafe for use under the conditions of use upon the basis of which the application was approved; (2) that new evidence of clinical experience, not contained in such application or not available to the Secretary until after such application was approved, or tests by new methods, or tests by methods not deemed reasonably applicable when such application was approved, evaluated together with the evidence available to the Secretary when the application was approved, shows that such drug is not shown to be safe for use under the conditions of use upon the basis of which the application was approved; or (3) on the basis of new information before him with respect to such drug, evaluated together with the evidence available to him when the application was approved, that there is a lack of substantial evidence that the drug will have the effect it purports or is represented to have under the conditions of use prescribed, recommended, or suggested in the labeling thereof; or (4) that the application contains any untrue statement of a material fact: *Provided*, That if the Secretary (or in his absence the officer acting as Secretary) finds that there is an imminent hazard to the public health, he may suspend the approval of such application immediately, and give the applicant prompt notice of his action and afford the applicant the opportunity for an expedited hearing under this subsection; but the authority conferred by this proviso to suspend the approval of an application shall not be delegated. The Secretary may also, after due notice and opportunity for hearing to the applicant, withdraw the approval of an application with respect to any









# Digest of CONGRESSIONAL PROCEEDINGS

## OF INTEREST TO THE DEPARTMENT OF AGRICULTURE

OFFICE OF  
BUDGET AND FINANCE

(For information only;  
should not be quoted  
or cited)

Issued Oct. 5, 1962  
For actions of Oct. 4, 1962  
87th-2d, No. 181

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**HIGHLIGHTS:** Senate passed USDA appropriation continuation measure for fiscal year 1963. Both Houses agreed to conference report on foreign trade bill. House insisted on amendments in disagreement on agricultural appropriation bill. Senate agreed to conference report on pay bill. Sen. Russell objected to consideration of supplemental appropriation bill. Senate passed roads bill. Sen. Morse commended Secretary Freeman's speech on forestry. Senate passed public works authorization bill. Senate received International Coffee Agreement. House passed bill for holding World Food Congress. Rep. Wilson, Ind., commended ASC committeemen. House agreed to conference report on school lunch fund apportionment bill. Sen. Mansfield and Rep. Cooley reviewed legislative accomplishments in farm legislation.

### SENATE

1. **AGRICULTURAL APPROPRIATIONS.** Passed without amendment S. J. Res. 234, an appropriation continuation measure for this Department authorizing appropriations for fiscal year 1963 for "projects or activities which were conducted in the fiscal year 1962 by the Department of Agriculture, including the corporations therein, and the Farm Credit Administration, at a rate for operations not in excess of the current rate (amount appropriated or authorized to be expended in the fiscal year 1962) or the rate provided for in the budget estimate (amount estimated to be appropriated or estimated to be expended in the fiscal year 1963) whichever is lower, except that the 1963 Agricultural Conservation Program shall not exceed \$250,000,000." Sen. Russell stated,



"I think it is prudent that the Senate pass the continuing resolution at this time, in the eventuality that it is impossible for the conferees to reach agreement on the regular appropriation bill." This measure had been reported by the Appropriations Committee earlier in the day (S. Rept. 2277). pp. 21014-5

2. FOREIGN TRADE. Both Houses agreed to the conference report on H. R. 11970, the foreign trade bill (by a vote of 256 to 91 in the House; no record vote in the Senate) (pp. 20997-21008, 21097-125). This bill will now be sent to the President. The conferees agreed to an amendment requiring the President to impose duties or other import restrictions on the products of any foreign country establishing and maintaining foreign import restrictions against U.S. agricultural products, notwithstanding any provision of any trade agreement under the bill and to the extent he deems necessary and appropriate, in order to prevent the establishment or obtain the removal of foreign import restrictions and to provide access of U. S. agricultural products to the markets of such foreign country. Also, agreed to an amendment of the Senate providing that Sec. 22 of the Agricultural Adjustment Act and import restrictions imposed thereunder shall be unaffected by this bill.
3. PERSONNEL. Agreed to the second conference report on H. R. 9727, the Federal pay and postal-rate increase bill, <sup>after the bill</sup> had been returned to conference earlier for further consideration (pp. 21017-20, 21053). The conferees struck out a provision in the bill which would have provided that retirement increases for retired employees could be paid out of the civil service retirement fund notwithstanding the provisions of Public Law 85-844.  
Passed without amendment S. 3459, to authorize the appointment of one additional Secretary of State.. p. 21057  
The Post Office and Civil Service/ <sup>Committee</sup> voted to report (but did not actually report) H. R. 5698, to extend the apportionment requirement of the Civil Service Act to temporary summer employment. p. D939
4. SUPPLEMENTAL APPROPRIATIONS. Sen. Russell objected to the second reading of H. R. 13290, the supplemental appropriation bill for 1963, thus delaying consideration of the bill for one day (p. 20956). The Appropriations Committee voted to report this bill earlier in the day (p. D939).
5. PUBLIC WORKS. Passed with amendments H. R. 13273, the public works authorization bill for rivers and harbors and flood control projects (pp. 20958-996). Senate conferees were appointed (p. 20996). Agreed to an amendment by Sen. Hartke providing for the establishment of a Wabash Basin Interagency Water Resources Commission (pp. 20992-3). Consideration of a similar bill S. 3773 was indefinitely postponed (p. 20996).
6. ROADS. Passed with amendments H. R. 12135, the roads authorization bill for 1964 and 1965 (pp. 21011-4, 21016-7, 21020-3). Both Houses appointed conferees (pp. 21023, 21183). This bill includes authorizations for forest highways of \$33 million for fiscal years 1964 and 1965, and for forest development roads and trails of an additional \$20 million for fiscal year 1963 to bring the total authorization for that year to \$60 million, \$70 million for 1964, and \$85 million for 1965 (as compared to the present level of \$40 million).
7. FORESTRY. Sen. Morse inserted and commended Secretary Freeman's speech on the national forestry program before the Membership Conference of the Western Pine Association. pp. 21084-7



87<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

# H. R. 13273

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IN THE SENATE OF THE UNITED STATES

OCTOBER 4, 1962

Received; read twice, considered, amended, read the third time, and passed

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## AN ACT

Authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

1        *Be it enacted by the Senate and House of Representa-*  
2        *tives of the United States of America in Congress assembled,*

3                TITLE I—RIVERS AND HARBORS

4        SEC. 101. That the following works of improvement of  
5        rivers and harbors and other waterways for navigation, flood  
6        control, and other purposes are hereby adopted and author-  
7        ized to be prosecuted under the direction of the Secretary of  
8        the Army and supervision of the Chief of Engineers, in ac-  
9        cordance with the plans and subject to the conditions rec-  
10       ommended by the Chief of Engineers in the respective

1 reports hereinafter designated: *Provided*, That the provisions  
2 of section 1 of the River and Harbor Act approved March  
3 2, 1945 (Public Law Numbered 14, Seventy-ninth Con-  
4 gress, first session), shall govern with respect to projects  
5 authorized in this title; and the procedures therein set forth  
6 with respect to plans, proposals, or reports for works of  
7 improvement for navigation or flood control and for irriga-  
8 tion and purposes incidental thereto, shall apply as if herein  
9 set forth in full:

10 NAVIGATION

11 Narraguagus River, Maine: House Document Numbered  
12 530, Eighty-seventh Congress, at an estimated cost of  
13 \$500,000;

14 Carvers Harbor, Vinalhaven, Maine: Senate Document  
15 Numbered 118, Eighty-seventh Congress, at an estimated  
16 cost of \$205,000;

17 Searsport Harbor, Maine: House Document Numbered  
18 500, Eighty-seventh Congress, at an estimated cost of  
19 \$700,000;

20 Portland Harbor, Maine: House Document Numbered  
21 216, Eighty-seventh Congress, at an estimated cost of  
22 \$8,340,000;

23 Kennebunk River, Maine: House Document Numbered  
24 459, Eighty-seventh Congress, at an estimated cost of  
25 \$270,000;



1        Portsmouth Harbor and Piscataqua River, Maine and  
2        New Hampshire: House Document Numbered 482, Eighty-  
3        seventh Congress, at an estimated cost of \$7,500,000;

4        Gloucester Harbor, Massachusetts: House Document  
5        Numbered 341, Eighty-seventh Congress, at an estimated  
6        cost of \$1,100,000;

7        Marblehead Harbor, Massachusetts: House Document  
8        Numbered 516, Eighty-seventh Congress, at an estimated  
9        cost of \$1,752,000;

10       Chelsea Harbor, Massachusetts: House Document Num-  
11       bered 350, Eighty-seventh Congress, at an estimated cost of  
12       \$2,843,000;

13       Dorchester Bay and Neponset River, Massachusetts:  
14       Senate Document Numbered 126, Eighty-seventh Congress,  
15       at an estimated cost of \$7,050,000;

16       Plymouth Harbor, Massachusetts: Senate Document  
17       Numbered 124, Eighty-seventh Congress, at an estimated  
18       cost of \$1,200,000;

19       Pawtuxet Cove, Rhode Island: House Document Num-  
20       bered 236, Eighty-seventh Congress, at an estimated cost  
21       of \$210,000;

22       Little Neck Bay, New York: House Document Num-  
23       bered 510, Eighty-seventh Congress, at an estimated cost  
24       of \$2,185,000;

25       Flushing Bay and Creek, New York: House Document

1   Numbered 551, Eighty-seventh Congress, at an estimated  
2   cost of \$1,695,000;

3       Buttermilk Channel, New York: House Document Num-  
4   bered 483, Eighty-seventh Congress, at an estimated cost  
5   of \$2,226,000;

6       Newark Bay, Hackensack and Passaic Rivers, New  
7   Jersey (channels to Port Elizabeth): Modification of the  
8   existing navigation project authorized by the River and Har-  
9   bor Act of 1954 (Public Law 780, Eighty-third Congress),  
10   House Document Numbered 252, is hereby authorized sub-  
11   stantially in accordance with the plans being prepared by  
12   the Chief of Engineers.

13       Raritan River, New Jersey: House Document Num-  
14   bered 455, Eighty-sixth Congress, maintenance;

15       Lynnhaven Inlet, Bay, and connecting waters, Virginia:  
16   House Document Numbered —, Eighty-seventh Congress, at  
17   an estimated cost of \$1,068,000: *Provided*, That nothing in  
18   this Act shall be construed as authorizing reimbursement to  
19   local interests for the Long Creek-Broad Bay Canal Bridge;

20       Rollinson Channel and channel from Hatteras Inlet to  
21   Hatteras, North Carolina: House Document Numbered 457,  
22   Eighty-seventh Congress, at an estimated cost of \$652,000;

23       Wilmington Harbor, North Carolina: Senate Document  
24   Numbered 114, Eighty-seventh Congress, at an estimated  
25   cost of \$6,370,000;



1 Savannah Harbor, Georgia: Senate Document Num-  
2 bered 115, Eighty-seventh Congress, at an estimated cost  
3 of \$605,000;

4 Key West Harbor, Florida: Senate Document Num-  
5 bered 106, Eighty-seventh Congress, at an estimated cost  
6 of \$820,000;

7 Tampa Harbor, Port Sutton and Ybor Channels, Florida:  
8 House Document Numbered 529, Eighty-seventh Congress,  
9 at an estimated cost of \$997,000;

10 Walter F. George lock and dam, Alabama: Senate  
11 Document Numbered 109, Eighty-seventh Congress, at an  
12 estimated cost of \$500,000;

13 Pensacola Harbor, Florida: House Document Numbered  
14 528, Eighty-seventh Congress, at an estimated cost of  
15 \$424,000;

16 Holt lock and dam, Alabama: The Secretary of the  
17 Army is hereby authorized and directed to cause an immedi-  
18 ate study to be made under the direction of the Chief of Engi-  
19 neers with a view to providing hydroelectric power gen-  
20 erating facilities in said dam, and his report on such study  
21 shall be submitted to the Congress by the Secretary of the  
22 Army within the first period of sixty calendar days of con-  
23 tinuous session of the Eighty-eighth Congress.

24 Pascagoula Harbor, Mississippi: House Document Num-

bered 560, Eighty-seventh Congress, at an estimated cost of \$4,870,000;

Mississippi River, Baton Rouge to Gulf of Mexico, Louisiana: Senate Document Numbered 36, Eighty-seventh Congress, at an estimated cost of \$357,000;

Gulf Intracoastal Waterway, Louisiana and Texas: House Document Numbered 556, Eighty-seventh Congress, at an estimated cost of \$25,540,000;

Calcasieu River Salt Water Barrier, Louisiana: House Document Numbered 582, Eighty-seventh Congress, at an estimated cost of \$3,310,000;

Mississippi River at Clarksville, Missouri: House Document Numbered 552, Eighty-seventh Congress, at an estimated cost of \$103,300;

Sandy Slough, Lincoln County, Missouri: House Document Numbered 419, Eighty-seventh Congress, at an estimated cost of \$195,000;

Sabine-Neches Waterway, Texas: House Document Numbered 553, Eighty-seventh Congress, at an estimated cost of \$20,830,000;

Trinity River, Wallisville Reservoir, Texas: House Document Numbered 215, Eighty-seventh Congress, at an estimated cost of \$9,162,000;

Gulf Intracoastal Waterway, channel to Palacios,



1 Texas: House Document Numbered 504, Eighty-seventh  
2 Congress, at an estimated cost of \$818,000;

3 Gulf Intracoastal Waterway, channel to Victoria, Texas:  
4 House Document Numbered 288, Eighty-seventh Congress,  
5 at an estimated cost of \$1,590,000;

6 Illinois Waterway, Illinois and Indiana: House Docu-  
7 ment Numbered 31, Eighty-sixth Congress, at an estimated  
8 cost of \$114,652,000;

9 Kaskaskia River, Illinois: Senate Document Numbered  
10 44, Eighty-seventh Congress, at an estimated cost of \$58,-  
11 200,000;

12 Lock and dam numbered 3, Big Sandy River, Kentucky,  
13 at an estimated cost not to exceed \$200,000; such work as  
14 may be necessary for the repair and restoration of said lock  
15 and dam: *Provided*, That the work authorized herein shall  
16 have no effect on the condition that local interests shall oper-  
17 ate and maintain the structure and related properties as  
18 required by the Act of Congress approved August 2, 1946  
19 (60 Stat. 1062) : *And provided further*, That there is hereby  
20 authorized to be expended from appropriations heretofore or  
21 hereinafter made for such functions administered by the  
22 Department of the Army such funds as may be necessary for  
23 the repair and restoration of lock and dam numbered 3 on  
24 the Big Sandy River.

1       Mississippi River between Missouri River and Minne-  
2   apolis, Minnesota: House Document Numbered 513, Eighty-  
3   seventh Congress, at an estimated cost of \$1,205,000;

4       Ontonagon Harbor, Michigan: House Document Num-  
5   bered 287, Eighty-seventh Congress, at an estimated cost  
6   of \$4,741,000;

7       Muskegon Harbor, Michigan: House Document Num-  
8   bered 474, Eighty-seventh Congress, at an estimated cost of  
9   \$609,000;

10      Leland Harbor, Michigan: House Document Numbered  
11   413, Eighty-seventh Congress, at an estimated cost of \$485,-  
12   000;

13      Little Bay De Noc, Gladstone Harbor and Kipling,  
14   Michigan: House Document Numbered 480, Eighty-seventh  
15   Congress, at an estimated cost of \$350,000;

16      Green Bay Harbor, Wisconsin: House Document Num-  
17   bered 470, Eighty-seventh Congress, at an estimated cost of  
18   \$4,270,000;

19      Kenosha Harbor, Wisconsin: House Document Num-  
20   bered 496, Eighty-seventh Congress, at an estimated cost  
21   of \$673,000;

22      Manitowoc Harbor, Wisconsin: House Document Num-  
23   bered 479, Eighty-seventh Congress, at an estimated cost  
24   of \$719,000;



1 Milwaukee Harbor, Wisconsin: House Document Num-  
2 bered 134, Eighty-seventh Congress, at an estimated cost  
3 of \$4,029,000;

4 Calumet Harbor and River, Illinois and Indiana: House  
5 Document Numbered —, Eighty-seventh Congress, at an  
6 estimated cost of \$11,464,000;

7 Chicago Harbor, Illinois: House Document Numbered  
8 485, Eighty-seventh Congress, at an estimated cost of  
9 \$1,505,000;

10 New Buffalo Harbor, Michigan: House Document Num-  
11 bered 481, Eighty-seventh Congress, at an estimated cost  
12 of \$667,000;

13 Caseville Harbor, Michigan: House Document Num-  
14 bered 64, Eighty-seventh Congress, at an estimated cost of  
15 \$327,000;

16 Saginaw River, Michigan: House Document Numbered  
17 544, Eighty-seventh Congress, at an estimated cost of  
18 \$4,780,000;

19 Rouge River, Michigan: House Document Numbered  
20 509, Eighty-seventh Congress, at an estimated cost of  
21 \$257,000;

22 Huron Harbor, Ohio: House Document Numbered 165,  
23 Eighty-seventh Congress, at an estimated cost of \$8,557,000;

1 Cleveland Harbor, Ohio: House Document Numbered  
2 527, Eighty-seventh Congress, at an estimated cost of  
3 \$888,000;

4 Conneaut Harbor, Ohio: House Document Numbered  
5 415, Eighty-seventh Congress, at an estimated cost of  
6 \$6,179,000;

7 Erie Harbor, Pennsylvania: House Document Num-  
8 bered 340, Eighty-seventh Congress, at an estimated cost  
9 of \$671,000;

10 Buffalo Harbor, New York: House Document Num-  
11 bered 451, Eighty-seventh Congress, at an estimated cost  
12 of \$2,797,000;

13 Great Sodus Bay Harbor, New York: House Document  
14 Numbered 138, Eighty-seventh Congress, at an estimated  
15 cost of \$765,000;

16 Oswego Harbor, New York: House Document Num-  
17 bered 471, Eighty-seventh Congress, at an estimated cost  
18 of \$1,180,000;

19 Dana Point Harbor, California: House Document Num-  
20 bered 532, Eighty-seventh Congress, at an estimated cost  
21 of \$3,730,000;

22 Santa Barbara Harbor, California: House Document  
23 Numbered 518, Eighty-seventh Congress, at an estimated  
24 cost of \$3,000,000;

25 Oakland Harbor, California, Fruitvale Avenue Bridge:



1 Senate Document Numbered 75, Eighty-seventh Congress,  
2 at an estimated cost of \$1,750,000;

3 Oakland Harbor, California: House Document Num-  
4 bered 353, Eighty-seventh Congress, at an estimated cost  
5 of \$6,775,000;

6 Noyo River and Harbor, California: Senate Document  
7 Numbered 121, Eighty-seventh Congress, at an estimated  
8 cost of \$13,231,000;

9 Columbia and Lower Willamette Rivers, Oregon and  
10 Washington: House Document Numbered 203, Eighty-  
11 seventh Congress, at an estimated cost of \$493,000;

12 Columbia and Lower Willamette Rivers below Van-  
13 couver, Washington, and Portland, Oregon: House Document  
14 Numbered 452, Eighty-seventh Congress, at an estimated  
15 cost of \$20,100,000;

16 Tacoma Harbor, Port Industrial and Hylebos Water-  
17 ways, Washington: Senate Document Numbered 104,  
18 Eighty-seventh Congress, at an estimated cost of \$2,460,000;

19 Kingston Harbor, Washington: House Document Num-  
20 bered 417, Eighty-seventh Congress, at an estimated cost  
21 of \$428,000;

22 Swinomish Channel, Washington: House Document  
23 Numbered 499, Eighty-seventh Congress, at an estimated  
24 cost of \$887,000;

25 Kaunakakai Harbor, Molokai, Hawaii: House Docu-

1 ment Numbered 484, Eighty-seventh Congress, at an esti-  
2 mated cost of \$7,919,000;

3 BEACH EROSION

4 State of New Hampshire: House Document Numbered  
5 416, Eighty-seventh Congress, at an estimated cost of  
6 \$88,000;

7 Fire Island Inlet and shore westerly to Jones Inlet,  
8 Long Island, New York: Modification of the existing beach  
9 erosion control project authorized by the River and Harbor  
10 Act of 1958 (Public Law 500, Eighty-fifth Congress),  
11 House Document Numbered 411, Eighty-fifth Congress, is  
12 hereby authorized substantially in accordance with the plans,  
13 which will include a sand bypassing system at Fire Island  
14 Inlet, being prepared by the Chief of Engineers;

15 Virginia Beach, Virginia: House Document Numbered  
16 382, Eighty-seventh Congress, periodic nourishment;

17 Fort Macon, Atlantic Beach and vicinity, North Caro-  
18 lina: House Document Numbered 555, Eighty-seventh Con-  
19 gress, at an estimated cost of \$194,000;

20 Virginia Key and Key Biscayne, Florida: House Docu-  
21 ment Numbered 561, Eighty-seventh Congress, at an esti-  
22 mated cost of \$220,000;

23 Lake Erie shoreline from the Michigan-Ohio State line  
24 to Marblehead, Ohio: House Document Numbered 63.  
25 Eighty-seventh Congress, at an estimated cost of \$658,500;



1        Sheffield Lake Community Park, Sheffield Lake Village,  
2        Ohio: House Document Numbered 414, Eighty-seventh  
3        Congress, at an estimated cost of \$100,300;

4        Ventura-Pierpont Area, California: House Document  
5        Numbered 458, Eighty-seventh Congress, at an estimated  
6        cost of \$515,000.

7        SEC. 102. The Secretary of the Army is authorized  
8        to convey 17.94 acres of land located at old lock and dam  
9        numbered 7, Ohio River, to the city of Midland, Pennsyl-  
10        vania, after November 1, 1962, for public park and recrea-  
11        tion purposes, without monetary consideration but subject  
12        to reversion to the United States if not utilized for public  
13        park and recreation purposes and further subject to such  
14        flowage rights as may be necessary in the operation of the  
15        New Cumberland lock and dam, Ohio River.

16        SEC. 103. That the Secretary of the Army is hereby  
17        authorized to reimburse local interests for such work done  
18        by them on the beach erosion projects authorized in section  
19        101, and in other sections of this Act, subsequent to the  
20        initiation of the cooperative studies which form the basis for  
21        the projects: *Provided*, That the work which may have been  
22        done on these projects is approved by the Chief of Engi-  
23        neers as being in accordance with the projects herein  
24        adopted: *Provided further*, That such reimbursement shall  
25        be subject to appropriations applicable thereto or funds

1 available therefor and shall not take precedence over other  
2 pending projects of higher priority for improvements.

3 SEC. 104. The body of water designated as the Redondo  
4 Beach Harbor, California, shall be known and designated  
5 hereafter as the Redondo Beach King Harbor, California.  
6 Any law, regulation, map, document, record, or other paper  
7 of the United States in which such body of water is referred  
8 to shall be held to refer to it as the Redondo Beach King  
9 Harbor, California.

10 SEC. 105. The Secretary of the Army is hereby au-  
11 thorized and directed to cause surveys to be made at the  
12 following named localities and subject to all applicable pro-  
13 visions of section 10 of the River and Harbor Act of 1950:

14 Channel between Point Shirley and Deer Island,  
15 Massachusetts, at approximately the same location as  
16 the former channel commonly known as Shirley Gut.  
17 Kings Bay Channel, Georgia.

18 Auglaize River in Wapakoneta, Auglaize County,  
19 Ohio.

20 SEC. 106. Title I of this Act may be cited as the  
21 "River and Harbor Act of 1962".

## 22 TITLE II—FLOOD CONTROL

23 SEC. 201. That section 3 of the Act approved June  
24 22, 1936 (Public Law Numbered 738, Seventy-fourth Con-  
25 gress), as amended by section 2 of the Act approved June



1 28, 1938 (Public Law Numbered 761, Seventy-fifth Con-  
2 gress), shall apply to all works authorized in this title except  
3 that for any channel improvement or channel rectification  
4 project, provisions (a), (b), and (c) of section 3 of said  
5 Act of June 22, 1936, shall apply thereto, and except as  
6 otherwise provided by law: *Provided*, That the authoriza-  
7 tion for any flood control project herein adopted requiring  
8 local cooperation shall expire five years from the date on  
9 which local interests are notified in writing by the Depart-  
10 ment of the Army of the requirements of local cooperation,  
11 unless said interests shall within said time furnish assur-  
12 ances satisfactory to the Secretary of the Army that the  
13 required cooperation will be furnished.

14 SEC. 202. The provisions of section 1 of the Act of  
15 December 22, 1944 (Public Law Numbered 534, Seventy-  
16 eighth Congress, second session), shall govern with respect  
17 to projects authorized in this Act, and the procedures therein  
18 set forth with respect to plans, proposals, or reports for  
19 works of improvement for navigation or flood control and  
20 for irrigation and purposes incidental thereto shall apply as  
21 if herein set forth in full.

22 SEC. 203. The following works of improvement for the  
23 benefit of navigation and the control of destructive flood-  
24 waters and other purposes are hereby adopted and author-  
25 ized to be prosecuted under the direction of the Secretary

1 of the Army and the supervision of the Chief of Engineers  
2 in accordance with the plans in the respective reports here-  
3 inafter designated and subject to the conditions set forth  
4 therein: *Provided*, That the necessary plans, specifications,  
5 and preliminary work may be prosecuted on any project  
6 authorized in this title with funds from appropriations here-  
7 tofore or hereafter made for flood control so as to be ready  
8 for rapid inauguration of a construction program: *Provided*  
9 *further*, That the projects authorized herein shall be initiated  
10 as expeditiously and prosecuted as vigorously as may be con-  
11 sistent with budgetary requirements: *And provided further*,  
12 That penstocks and other similar facilities adapted to pos-  
13 sible future use in the development of hydroelectric power  
14 shall be installed in any dam authorized in this Act for con-  
15 struction by the Department of the Army when approved  
16 by the Secretary of the Army on the recommendation of the  
17 Chief of Engineers and the Federal Power Commission.

18 NEW ENGLAND-ATLANTIC COASTAL AREA

19 The project for navigation and hurricane-flood protection  
20 at Wareham-Marion, Massachusetts, is hereby authorized  
21 substantially in accordance with the recommendation of the  
22 Chief of Engineers in House Document Numbered 548,  
23 Eighty-seventh Congress, at an estimated cost of \$3,811,500.

24 The project for navigation and hurricane flood protection



1 at Point Judith, Rhode Island, is hereby authorized substan-  
2 tially in accordance with the recommendations of the Chief  
3 of Engineers in House Document Numbered 521, Eighty-  
4 seventh Congress, at an estimated cost of \$2,414,000.

5 The project for navigation and hurricane-flood control  
6 protection at Narragansett Pier, Rhode Island, is hereby  
7 authorized substantially in accordance with the recommenda-  
8 tions of the Chief of Engineers in House Document Num-  
9 bered 195, Eighty-seventh Congress, at an estimated cost of  
10 \$1,152,000.

11 LONG ISLAND SOUND AREA

12 The project for hurricane-flood control protection at New  
13 London, Connecticut, is hereby authorized substantially in  
14 accordance with the recommendations of the Chief of Engi-  
15 neers in House Document Numbered 478, Eighty-seventh  
16 Congress, at an estimated cost of \$2,401,000.

17 The project for hurricane-flood protection at Westport,  
18 Connecticut, is hereby authorized substantially in accordance  
19 with the recommendations of the Chief of Engineers in House  
20 Document Numbered 412, Eighty-seventh Congress, at an  
21 estimated cost of \$217,000.

22 The project for hurricane-flood protection at Mystic,  
23 Connecticut, is hereby authorized substantially in accordance

1 with the recommendations of the Chief of Engineers in House  
2 Document Numbered 411, Eighty-seventh Congress, at an  
3 estimated cost of \$1,490,000.

4 HOUSATONIC RIVER BASIN

5 The project for flood protection on the Naugatuck River  
6 at Ansonia-Derby, Connecticut, is hereby authorized sub-  
7 stantially in accordance with the recommendations of the  
8 Chief of Engineers in House Document Numbered 437,  
9 Eighty-seventh Congress, at an estimated cost of \$5,620,000.

10 HUDSON RIVER BASIN

11 The project for flood protection on Rondout Creek and  
12 Wallkill River and their tributaries, New York and New  
13 Jersey, is hereby authorized substantially in accordance with  
14 the recommendations of the Chief of Engineers in Senate  
15 Document Numbered 113, Eighty-seventh Congress, at an  
16 estimated cost of \$5,111,000.

17 NEW JERSEY—ATLANTIC COASTAL AREA

18 The project for hurricane-flood protection and beach  
19 erosion control on Raritan Bay and Sandy Hook Bay, New  
20 Jersey, is hereby authorized substantially in accordance with  
21 the recommendations of the Chief of Engineers in House  
22 Document Numbered 464, Eighty-seventh Congress, at an  
23 estimated cost of \$3,097,000.



## 1                   SUSQUEHANNA RIVER BASIN

2       The project for the Juniata River and tributaries,  
3   Pennsylvania, is hereby authorized in accordance with the  
4   recommendations of the Chief of Engineers in House Docu-  
5   ment Numbered 565, Eighty-seventh Congress, but without  
6   the power features, at an estimated cost of \$32,150,000:  
7   *Provided*, That if the Chief of Engineers deems it desirable  
8   he may submit a reexamination report on the power gener-  
9   ating features to the Congress for its consideration.

## 10                  DELAWARE RIVER BASIN

11       The project for the comprehensive development of the  
12   Delaware River Basin, New York, New Jersey, Pennsyl-  
13   vania, and Delaware, is hereby authorized substantially in  
14   accordance with the recommendations of the Chief of Engi-  
15   neers, in House Document Numbered 522, Eighty-seventh  
16   Congress, at an estimated cost of \$224,000,000.

## 17                  POTOMAC RIVER BASIN

18       The project for the North Branch of the Potomac River,  
19   Maryland and West Virginia, is hereby authorized substan-  
20   tially in accordance with the recommendations of the Chief of  
21   Engineers, in House Document Numbered 469, Eighty-  
22   seventh Congress, at an estimated cost of \$50,965,000.

## 1 MIDDLE ATLANTIC COASTAL AREA

2 The project for hurricane-flood protection at Norfolk,  
3 Virginia, is hereby authorized substantially in accordance  
4 with the recommendations of the Chief of Engineers in House  
5 Document Numbered 354, Eighty-seventh Congress, at an  
6 estimated cost of \$1,537,000.

7 The project for hurricane-flood protection and beach  
8 erosion control at Carolina Beach and vicinity, North Caro-  
9 lina, is hereby authorized substantially in accordance with  
10 the recommendations of the Chief of Engineers in House  
11 Document Numbered 418, Eighty-seventh Congress, at an  
12 estimated cost of \$739,000.

## 13 APALACHICOLA RIVER BASIN, GEORGIA

14 The project for the West Point Reservoir, Chattahoo-  
15 chee River, Georgia, is hereby authorized substantially in ac-  
16 cordance with the recommendations of the Secretary of the  
17 Army and the Chief of Engineers in House Document Num-  
18 bered 570, Eighty-seventh Congress, at an estimated cost of  
19 \$52,900,000.

## 20 CENTRAL AND SOUTHERN FLORIDA

21 The comprehensive plan for flood control and other  
22 purposes in central and southern Florida, approved in the  
23 Act of June 30, 1948, and subsequent Acts of Congress is  
24 hereby modified to include the following items:

25 The project for south Dade County, Florida, is hereby



1 authorized substantially in accordance with the recommenda-  
2 tions of the Secretary of the Army and the Chief of Engineers  
3 in Senate Document Numbered 138, Eighty-seventh Con-  
4 gress, at an estimated cost of \$13,388,000;

5 The project for flood protection in the Cutler Drain  
6 Area, Florida, is hereby authorized substantially in accord-  
7 ance with the recommendations of the Chief of Engineers in  
8 Senate Document Numbered 123, Eighty-seventh Congress,  
9 at an estimated cost of \$2,063,000.

10 GREEN SWAMP REGION, FLORIDA

11 The project for the four river basins, Florida, namely  
12 the Hillsborough, Oklawaha, Withlacoochee, and Peace  
13 Rivers, is hereby authorized substantially in accordance with  
14 the recommendations of the Chief of Engineers in House  
15 Document Numbered 585, Eighty-seventh Congress, at an  
16 estimated cost of \$57,760,000.

17 PASCAGOULA RIVER BASIN

18 The project for flood protection on the Chunky Creek,  
19 Chickasawhay and Pascagoula Rivers, Mississippi, is hereby  
20 authorized substantially in accordance with the recommenda-  
21 tions of the Chief of Engineers in House Document Num-  
22 bered 549, Eighty-seventh Congress, at an estimated cost of  
23 \$6,740,000.

## 1                    LOWER MISSISSIPPI RIVER BASIN

2            The project for flood control and improvement of the  
3 lower Mississippi River, adopted by the Act of May 15,  
4 1928, as amended, is hereby modified and expanded to in-  
5 clude construction of certain improvements in Gin and Muddy  
6 Bayous, Yazoo River Basin, Mississippi, substantially in  
7 accordance with plans on file in the Office, Chief of Engi-  
8 neers, at an estimated cost of \$150,000.

9            The project for hurricane-flood protection on the Missis-  
10 sippi River Delta at and below New Orleans, Louisiana, is  
11 hereby authorized substantially in accordance with the rec-  
12 ommendations of the Chief of Engineers in House Docu-  
13 ment Numbered 550, Eighty-seventh Congress, at an esti-  
14 mated cost of \$7,502,000.

15          The project for flood protection on Red River in  
16 Natchitoches and Red River Parishes, Louisiana, is hereby  
17 authorized substantially in accordance with the recommenda-  
18 tions of the Chief of Engineers in House Document Num-  
19 bered 476, Eighty-seventh Congress, at an estimated cost  
20 of \$1,293,000.

21          The lower auxiliary channel, Yazoo River Basin, Mis-  
22 sissippi, a unit in the Mississippi River and tributaries  
23 project, shall hereafter be known and designated as the Will  
24 M. Whittington Auxiliary Channel in honor of the late Mem-



1 ber of the House of Representatives from the Third District  
2 of Mississippi, and former chairman of the House Public  
3 Works Committee. The Secretary of the Army, acting  
4 through the Chief of Engineers, United States Army, is  
5 hereby authorized and directed to erect appropriate markers  
6 along the auxiliary channel designating the project "The  
7 Will M. Whittington Auxiliary Channel". Any law, regula-  
8 tion, document, or record of the United States in which such  
9 project is designated or referred to under the name of lower  
10 auxiliary channel, Yazoo River Basin, Mississippi, shall be  
11 held and considered to refer to such project by the name of  
12 "Will M. Whittington Auxiliary Channel".

13                                   BUFFALO BAYOU

14       The project for flood protection on Vince and Little  
15 Vince Bayous, Texas, is hereby authorized substantially as  
16 recommended by the Chief of Engineers in House Document  
17 Numbered 441, Eighty-seventh Congress, at an estimated  
18 cost of \$2,224,000.

19                                   GULF OF MEXICO

20       The project for hurricane-flood protection at Port Arthur  
21 and vicinity, Texas, is hereby authorized substantially in  
22 accordance with the recommendations of the Chief of Engi-  
23 neers in House Document Numbered 505, Eighty-seventh  
24 Congress, at an estimated cost of \$23,380,000.

25       The project for hurricane-flood protection at Freeport

1 and vicinity, Texas, is hereby authorized substantially in  
2 accordance with the recommendations of the Chief of Engi-  
3 neers in House Document Numbered 495, Eighty-seventh  
4 Congress, at an estimated cost of \$3,780,000.

5

## TRINITY RIVER BASIN

6 The project for flood protection on the East Fork of  
7 the Trinity River, Texas, is hereby authorized substantially  
8 in accordance with the recommendations of the Chief of  
9 Engineers in House Document Numbered 554, Eighty-  
10 seventh Congress, at an estimated cost of \$23,760,000.

11 The project for extension of the Fort Worth Floodway,  
12 Texas, is hereby authorized substantially as recommended  
13 by the Chief of Engineers in House Document Numbered  
14 454, Eighty-seventh Congress, at an estimated cost of  
15 \$5,148,000.

16

## BRAZOS RIVER BASIN

17 The comprehensive plan for the Brazos River Basin,  
18 authorized by the Act of September 3, 1954, as amended  
19 by subsequent Acts of Congress, is hereby further modified to  
20 include the following item, and the monetary authorization  
21 for said comprehensive plan is hereby increased accordingly.

22 The project for the San Gabriel River, Texas, is hereby  
23 authorized substantially in accordance with the recommenda-  
24 tions of the Chief of Engineers in House Document Num-



bered —, Eighty-seventh Congress, at an estimated cost of \$20,250,000.

The project for flood protection on the Clear Fork of the Brazos River at and in the vicinity of Abilene, Texas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 506, Eighty-seventh Congress, at an estimated cost of \$31,200,000.

#### TULAROSA BASIN

The project for flood protection at Alamogordo, New Mexico, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 473, Eighty-seventh Congress, at an estimated cost of \$2,040,000.

#### RIO GRANDE BASIN

The project for flood protection at Las Cruces, New Mexico, is hereby authorized substantially as recommended by the Chief of Engineers in Senate Document Numbered 117, Eighty-seventh Congress, at an estimated cost of \$3,350,000.

#### ARKANSAS RIVER BASIN

The Dardanelle lock and dam, Arkansas River, Arkansas, is hereby modified to provide for construction of a sewage outfall for the city of Russellville, Arkansas, substan-

1 tially in accordance with plans of said city, approved by the  
2 Chief of Engineers, at an estimated cost of \$1,400,000.

3 The project for flood protection on Cow Creek, Kansas,  
4 is hereby authorized substantially in accordance with the  
5 recommendations of the Chief of Engineers in House Docu-  
6 ment Numbered 531, Eighty-seventh Congress, at an esti-  
7 mated cost of \$1,560,000.

8 The project for flood protection on the Arkansas River  
9 at Dodge City, Kansas, is hereby authorized substantially  
10 in accordance with the recommendations of the Chief of  
11 Engineers, in House Document Numbered 498, Eighty-  
12 seventh Congress, at an estimated cost of \$2,133,000.

13 The project for improvement of the Verdigris River and  
14 tributaries, Oklahoma and Kansas, is hereby authorized sub-  
15 stantially in accordance with the recommendations of the  
16 Chief of Engineers in House Document Numbered 563,  
17 Eighty-seventh Congress, at an estimated cost of  
18 \$62,400,000.

19 The project for the Kaw Reservoir, Arkansas River,  
20 Oklahoma, is hereby authorized substantially in accordance  
21 with the recommendations of the Chief of Engineers in  
22 Senate Document Numbered 143, Eighty-seventh Congress,  
23 at an estimated cost of \$83,230,000.



## WHITE RIVER BASIN

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The project for flood protection on Village Creek, White River, and Mayberry Levee Districts, Arkansas, is hereby modified to provide for construction of a pumping plant, substantially as recommended by the Chief of Engineers in House Document Numbered 577, Eighty-seventh Congress, at an estimated cost of \$1,018,000.

The flood protection project for Village Creek, Jackson and Lawrence Counties, Arkansas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 352, Eighty-seventh Congress, at an estimated cost of \$1,968,000.

## RED RIVER BASIN

The project for Lake Kemp, Wichita River, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 144, Eighty-seventh Congress, at an estimated cost of \$6,410,000.

The project providing for the construction of two experimental water quality study projects in the Arkansas-Red River Basins, is hereby authorized substantially in accordance with the recommendations of the Chief of Engi-

neers in Senate Document Numbered 105, Eighty-seventh Congress, at an estimated cost of \$300,000.

The modification of the Broken Bow Reservoir, Mountain Fork River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 137, Eighty-seventh Congress, at an estimated cost of \$23,800,000.

The project for the Clayton and Tuskahoma Reservoirs, Kiamichi River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 145, Eighty-seventh Congress, at an estimated cost of \$29,748,000.

#### MISSOURI RIVER BASIN

The comprehensive plan for the Missouri River Basin, approved in the Act of June 28, 1938, as amended by subsequent Acts of Congress, is hereby further modified to include the following projects, and the monetary authorization for said general comprehensive plan is increased accordingly.

(a) The Kaysinger Bluff Reservoir, Osage River, Missouri, is hereby modified substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered —, Eighty-seventh Congress, at an estimated additional cost of \$43,245,000: *Provided*, That



1 nothing in this act shall be construed as authorizing the  
2 acquisition of additional lands for the establishment of a na-  
3 tional wildlife refuge at the reservoir.

4 (b) The project for the Kansas River, Kansas, Ne-  
5 braska, and Colorado, is hereby authorized substantially in  
6 accordance with the recommendations of the Secretary of the  
7 Army and the Chief of Engineers in Senate Document Num-  
8 bered 122, Eighty-seventh Congress, at an estimated cost  
9 of \$88,070,000: *Provided*, That the authorization for the  
10 Woodbine Reservoir on Lyon Creek is deferred at this time,  
11 subject to submission of a new feasibility report by the  
12 Chief of Engineers to the Eighty-eighth Congress, which  
13 shall take into account the water and related land resource  
14 development plans of the Soil Conservation Service, the  
15 Kansas Water Resources Board, and Lyon Creek Water-  
16 shed Joint District Numbered 41, and preparation of said  
17 report is hereby authorized.

18 The project for flood protection on Papillion Creek and  
19 tributaries, Nebraska, is hereby authorized substantially in  
20 accordance with the recommendations of the Chief of Engi-  
21 neers in House Document Numbered 475, Eighty-seventh  
22 Congress, at an estimated cost of \$2,122,000.

23 The project for flood protection on Indian Creek, Iowa,  
24 is hereby authorized substantially in accordance with the

1 recommendations of the Chief of Engineers in House Docu-  
2 ment Numbered 438, Eighty-seventh Congress, at an esti-  
3 mated cost of \$1,270,000.

4 OHIO RIVER BASIN

5 The project for flood protection on the Kokosing River,  
6 Ohio, is hereby authorized substantially as recommended by  
7 the Chief of Engineers in House Document Numbered 220,  
8 Eighty-seventh Congress, at an estimated cost of \$2,438,000.

9 The project for flood protection on the Mad River above  
10 Huffman Dam, Ohio, is hereby authorized substantially in  
11 accordance with the recommendations of the Chief of Engi-  
12 neers in House Document Numbered 439, Eighty-seventh  
13 Congress, at an estimated cost of \$7,930,000.

14 The project for the Kentucky River, Kentucky, is here-  
15 by authorized substantially in accordance with the recom-  
16 mendations of the Chief of Engineers, in House Document  
17 Numbered 423, Eighty-seventh Congress, at an estimated  
18 cost of \$26,020,000.

19 The project for flood protection on the Buckhannon  
20 River, West Virginia, is hereby authorized substantially in  
21 accordance with the recommendations of the Chief of Engi-  
22 neers in Senate Document Numbered 43, Eighty-seventh  
23 Congress, at an estimated cost of \$1,206,000.

24 The project for the Guyandot River and tributaries,  
25 West Virginia, is hereby authorized substantially in accord-



1   ance with the recommendations of the Chief of Engineers in  
2   House Document Numbered 569, Eighty-seventh Congress,  
3   second session, at an estimated cost of \$60,477,000.

4       The project for Twelvepole Creek, West Virginia, is  
5   hereby authorized substantially in accordance with the rec-  
6   ommendations of the Chief of Engineers, in House Document  
7   Numbered 520, Eighty-seventh Congress, at an estimated  
8   cost of \$11,000,000.

9       The project for flood protection on Crab Creek at  
10   Youngstown, Ohio, is hereby authorized substantially in  
11   accordance with the recommendations of the Chief of Engi-  
12   neers in House Document Numbered 440, Eighty-seventh  
13   Congress, at an estimated cost of \$2,268,000.

14       The project for the Scioto River, Ohio, is hereby author-  
15   ized substantially in accordance with the recommendations of  
16   the Chief of Engineers in House Document Numbered —,  
17   Eighty-seventh Congress, at an estimated cost of  
18   \$55,847,000.

19       The project for flood protection on the Allegheny River  
20   at Salamanca, New York, is hereby authorized substantially  
21   in accordance with the recommendations of the Chief of  
22   Engineers in House Document Numbered 166, Eighty-  
23   seventh Congress, at an estimated cost of \$1,390,000.

24       The project for French Creek, Pennsylvania, is hereby  
25   authorized substantially in accordance with the recommenda-

1 tions of the Chief of Engineers in Senate Document Num-  
2 bered 95, Eighty-seventh Congress, at an estimated cost of  
3 \$23,102,000.

4 The project for the Saline River and tributaries, Illinois,  
5 authorized by the Flood Control Act of 1958 (Public Law  
6 85-500), is hereby modified to provide that no cash con-  
7 tribution shall be required of local interests: *Provided*, That  
8 the other items of local cooperation recommended by the  
9 Chief of Engineers in House Document Numbered 316 of  
10 the Eighty-fourth Congress shall still be applicable.

11 UPPER MISSISSIPPI RIVER BASIN

12 The project for the Illinois River and tributaries, Illinois,  
13 Wisconsin, and Indiana, is hereby authorized substantially as  
14 recommended by the Chief of Engineers in House Document  
15 Numbered 472, Eighty-seventh Congress, at an estimated  
16 cost of \$71,465,000.

17 The project for Rend Lake, Illinois, is hereby authorized  
18 substantially in accordance with the recommendations of the  
19 Chief of Engineers in House Document Numbered 541,  
20 Eighty-seventh Congress, at an estimated cost of \$35,500,000.

21 The project for flood protection on the Mississippi River  
22 at and in the vicinity of Guttenberg, Iowa, is hereby author-  
23 ized substantially in accordance with the recommendations  
24 of the Chief of Engineers in House Document Numbered



1 286, Eighty-seventh Congress, at an estimated cost of  
2 \$729,000.

3 The project for flood protection on the Mississippi River  
4 between Sainte Genevieve and Saint Marys, Missouri, is  
5 hereby authorized substantially in accordance with the rec-  
6 ommendations of the Chief of Engineers in House Document  
7 Numbered 519, Eighty-seventh Congress, at an estimated  
8 cost of \$2,500,000.

9 The project for the Harrisonville and Ivy Landing  
10 Drainage and Levee District Number 2, Illinois, is hereby  
11 authorized substantially in accordance with the recommenda-  
12 tions of the Chief of Engineers in House Document Num-  
13 bered 542, Eighty-seventh Congress, at an estimated cost  
14 of \$1,112,000.

15 The project for the Columbia Drainage and Levee Dis-  
16 trict Number 3, Illinois, is hereby authorized substantially in  
17 accordance with the recommendations of the Chief of Engi-  
18 neers in House Document Numbered 543, Eighty-seventh  
19 Congress, at an estimated cost of \$986,000.

20 The project for the Prairie DuPont Levee and Sanitary  
21 District, Illinois, is hereby authorized substantially in ac-  
22 cordance with the recommendations of the Chief of Engineers  
23 in House Document Numbered 540, Eighty-seventh Con-  
24 gress, at an estimated cost of \$921,000.

1       The project for flood protection on Richland Creek,  
2 Illinois, is hereby authorized substantially in accordance with  
3 the recommendations of the Chief of Engineers in House  
4 Document Numbered 571, Eighty-seventh Congress, at an  
5 estimated cost of \$4,995,000.

6       The project for the Joanna Reservoir, Salt River,  
7 Missouri, is hereby authorized substantially in accordance  
8 with the recommendations of the Chief of Engineers in House  
9 Document Numbered 507, Eighty-seventh Congress, at an  
10 estimated cost of \$63,300,000.

11       The project for flood protection on the Pecatonica River,  
12 Illinois and Wisconsin, is hereby authorized substantially in  
13 accordance with the recommendations of the Chief of Engi-  
14 neers in House Document Numbered 539, Eighty-seventh  
15 Congress, at an estimated cost of \$850,000.

16       The project for the Mississippi River Urban Areas from  
17 Hampton, Illinois, to Cassville, Wisconsin, is hereby author-  
18 ized substantially in accordance with the recommendations  
19 of the Chief of Engineers in House Document Numbered 450,  
20 Eighty-seventh Congress, at an estimated cost of \$5,350,000.

21       The project for the Kickapoo River, Wisconsin, is hereby  
22 authorized substantially as recommended by the Chief of  
23 Engineers in House Document Numbered 557, Eighty-  
24 seventh Congress, at an estimated cost of \$15,570,000.

25       The project for flood protection on the Warroad River



1 and Bull Dog Creek, Minnesota, is hereby authorized sub-  
2 stantially in accordance with the recommendations of the  
3 Chief of Engineers in House Document Numbered 449,  
4 Eighty-seventh Congress, at an estimated cost of \$972,000.

5 GREAT LAKES BASIN

6 The project for flood protection on the River Rouge,  
7 Michigan, is hereby authorized substantially in accordance  
8 with the recommendations of the Chief of Engineers in House  
9 Document Numbered 148, Eighty-seventh Congress, at an  
10 estimated cost of \$8,659,000.

11 The project for flood protection on the Sandusky River,  
12 Ohio, is hereby authorized substantially in accordance with  
13 the recommendations of the Chief of Engineers in Senate  
14 Document Numbered 136, Eighty-seventh Congress, at an  
15 estimated cost of \$4,300,000.

16 TRUCKEE RIVER BASIN

17 The project for flood protection on the Truckee River  
18 and tributaries, California and Nevada, is hereby authorized  
19 substantially in accordance with the recommendations of the  
20 Chief of Engineers in House Document Numbered 435,  
21 Eighty-seventh Congress, at an estimated cost of \$2,385,000.

22 SAN FRANCISCO BAY AREA

23 The project for flood protection on Alameda Creek, Cali-  
24 fornia, is hereby authorized substantially in accordance with  
25 the recommendations of the Chief of Engineers in Senate

1 Document Numbered 128, Eighty-seventh Congress, at an  
2 estimated cost of \$14,680,000.

3 The project for Corte Madera Creek, Marin County,  
4 California, is hereby authorized substantially in accordance  
5 with the recommendations of the Secretary of the Army and  
6 the Chief of Engineers in House Document Numbered 545,  
7 Eighty-seventh Congress, at an estimated cost of \$5,534,000.

8 SAN JOAQUIN RIVER BASIN

9 The New Melones project, Stanislaus River, California,  
10 authorized by the Flood Control Act approved December  
11 22, 1944 (58 Stat. 887), is hereby modified substantially  
12 in accordance with the recommendations of the Chief of  
13 Engineers in House Document Numbered 453, Eighty-  
14 seventh Congress, at an estimated cost of \$113,717,000:  
15 *Provided*, That upon completion of construction of the dam  
16 and powerplant by the Corps of Engineers, the project shall  
17 become an integral part of the Central Valley project and  
18 be operated and maintained by the Secretary of the Interior  
19 pursuant to the Federal reclamation laws, except that the  
20 flood control operation of the project shall be in accordance  
21 with the rules and regulations prescribed by the Secretary  
22 of the Army: *Provided further*, That the Stanislaus River  
23 Channel, from Goodwin Dam to the San Joaquin River,  
24 shall be maintained by the Secretary of the Army to a  
25 capacity of at least eight thousand cubic feet per second



1 subject to the condition that responsible local interests agree  
2 to maintain private levees and to prevent encroachment on  
3 the existing channel and floodway between the levees:  
4 *Provided further*, That before initiating any diversions of  
5 water from the Stanislaus River Basin in connection with  
6 the operation of the Central Valley project, the Secretary  
7 of the Interior shall determine the quantity of water required  
8 to satisfy all existing and anticipated future needs within  
9 that basin and the diversions shall at all times be sub-  
10 ordinate to the quantities so determined: *Provided further*,  
11 That the Secretary of the Army adopt appropriate measures  
12 to insure the preservation and propagation of fish and wild-  
13 life in the New Melones project and shall allocate to the  
14 preservation and propagation of fish and wildlife, as pro-  
15 vided in the Act of August 14, 1946 (60 Stat. 1080), an  
16 appropriate share of the cost of constructing the Stanislaus  
17 River division and of operating and maintaining the same,  
18 such costs to be nonreimbursable: *Provided further*, That  
19 the Secretary of the Army, in connection with the New  
20 Melones project, construct basic public recreation facilities,  
21 acquire land necessary for that purpose, the cost of con-  
22 structing such facilities and acquiring such lands to be non-  
23 reimbursable and nonreturnable: *Provided further*, That  
24 contracts for the sale and delivery of the additional electric  
25 energy available from the Central Valley project power

1 system as a result of the construction of the plants herein  
2 authorized and their integration with that system shall be  
3 made in accordance with preferences expressed in the Federal  
4 reclamation laws except that a first preference, to the extent  
5 of 25 per centum of such additional energy, shall be given,  
6 under reclamation law, to preference customers in Tuolumne  
7 and Calaveras Counties, California, for use in that county,  
8 who are ready, able, and willing, within twelve months  
9 after notice of availability by the Secretary of the Interior,  
10 to enter into contracts for the energy and that Tuolumne  
11 and Calaveras County preference customers may exercise  
12 their option in the same date in each successive fifth year  
13 providing written notice of their intention to use the energy  
14 is given to the Secretary not less than eighteen months prior  
15 to said dates: *And provided further*, That the Secretary of  
16 the Army give consideration during the preconstruction  
17 planning for the New Melones project to the advisability  
18 of including storage for the regulation of streamflow for the  
19 purpose of downstream water quality control.

20 The Hidden Reservoir, Fresno River, California, is  
21 hereby authorized substantially in accordance with the recom-  
22 mendations of the Chief of Engineers in Senate Document  
23 Numbered 37, Eighty-seventh Congress, at an estimated cost  
24 of \$14,338,000.

25 The Buchanan Reservoir, Chowchilla River, California,



1 is hereby authorized substantially in accordance with the  
2 recommendations of the Chief of Engineers in Senate Docu-  
3 ment Numbered 98, Eighty-seventh Congress, at an esti-  
4 mated cost of \$13,585,000.

5 RUSSIAN RIVER BASIN

6 The project for Russian River, Dry Creek, California,  
7 is hereby authorized substantially in accordance with the  
8 recommendations of the Chief of Engineers in House Docu-  
9 ment Numbered 547, Eighty-seventh Congress, at an esti-  
10 mated cost of \$42,400,000.

11 REDWOOD CREEK BASIN

12 The project for flood protection on Redwood Creek,  
13 Humboldt County, California, is hereby authorized sub-  
14 stantially in accordance with the recommendations of the  
15 Chief of Engineers in House Document Numbered 497,  
16 Eighty-seventh Congress, at an estimated cost of \$2,580,000.

17 LOS ANGELES RIVER BASIN

18 In addition to previous authorizations, there is hereby  
19 authorized to be appropriated the sum of \$3,700,000 for the  
20 prosecution of the comprehensive plan for the Los Angeles  
21 River Basin approved in the Act of August 18, 1941, as  
22 amended and supplemented by subsequent Acts of Congress.

23 ROGUE RIVER BASIN

24 The project for the Rogue River, Oregon and California,  
25 is hereby authorized substantially in accordance with the

1 recommendations of the Chief of Engineers in House Docu-  
2 ment Numbered 566, Eighty-seventh Congress, at an esti-  
3 mated cost of \$106,700,000: *Provided*, That (a) the project  
4 is located, constructed, and operated to accomplish the bene-  
5 fits as set forth and described in the report of the district  
6 engineer and its appended report; (b) water for all purposes  
7 shall be released in the quantities and qualities at points  
8 described in the district engineer's report and its appendixes;  
9 (c) in the years of short water supply all water users will  
10 share the available water in the same proportions that they  
11 would share the total full supply when it is available and that  
12 no further water-use allocations will be made from the author-  
13 ized storage so as to retain the maximum possible benefits to  
14 authorized uses during the periods of adversity when storage  
15 shortages occur.

16 COLUMBIA RIVER BASIN

17 The project for the Ririe Dam and Reservoir, Willow  
18 Creek, Idaho, is hereby authorized substantially in accord-  
19 ance with the recommendations of the Chief of Engineers  
20 in House Document Numbered 562, Eighty-seventh Con-  
21 gress, at an estimated cost of \$7,027,000.

22 The project for the Blackfoot Dam and Reservoir, Black-  
23 foot River, Idaho, is hereby authorized substantially in  
24 accordance with the recommendations of the Chief of Engi-



1 neers in House Document Numbered 568, Eighty-seventh  
2 Congress, at an estimated cost of \$829,000.

3 The project for the Asotin Dam and Reservoir, Snake  
4 River, Idaho and Washington, is hereby authorized substan-  
5 tially in accordance with the recommendations of the Chief  
6 of Engineers in House Document Numbered 403, Eighty-  
7 seventh Congress, at an estimated cost of \$99,818,000.

8 The project for the China Gardens Dam and Reservoir,  
9 Snake River, Idaho, Oregon, and Washington, is hereby  
10 authorized substantially in accordance with the recommenda-  
11 tions of the Chief of Engineers in House Document Num-  
12 bered 403, Eighty-seventh Congress, at an estimated cost  
13 of \$74,777,000.

14 COOK INLET, ALASKA

15 The project for Bradley Lake, Cook Inlet, Alaska, is  
16 hereby authorized substantially in accordance with the rec-  
17 ommendations of the Chief of Engineers in House Document  
18 Numbered 455, Eighty-seventh Congress, at an estimated  
19 cost of \$45,750,000.

20 SEC. 204. That section 205 of the Flood Control Act of  
21 1948, as amended (33 U.S.C. 701s), is amended by, (a)  
22 striking out "\$10,000,000" and inserting "\$25,000,000"  
23 in lieu thereof, (b) substituting for the term "small flood  
24 control projects" the term "small projects for flood control

1 and related purposes", and (c) striking out "*Provided, That*  
2 not more than \$400,000 shall be allotted for this purpose at  
3 any single locality from the appropriations for any one  
4 fiscal year" and inserting in lieu thereof "*Provided, That*  
5 not more than \$2,000,000 shall be allotted under this section  
6 for a project at any single locality and the amount allotted  
7 shall be sufficient to complete Federal participation in the  
8 project: *And provided further, That* no construction shall be  
9 undertaken on any project under the provisions of this section  
10 with a Federal cost in excess of \$1,000,000 unless such  
11 project has been approved by resolutions adopted by the  
12 Committee on Public Works of the Senate and the Com-  
13 mittee on Public Works of the House of Representatives,  
14 respectively."

15       SEC. 205. The consent of Congress is hereby granted to  
16 Duke Power Company, its successors and assigns, to con-  
17 struct, maintain, and operate a dam across Savannah River  
18 between Anderson County, South Carolina, and Elbert  
19 County, Georgia, near Middleton Shoals, and about two  
20 hundred and ninety-seven miles above the mouth of said river,  
21 for the purpose of providing a pool for condenser water for  
22 a steam-electric plant. Construction on such dam shall not  
23 be commenced until the plans therefor have been submitted  
24 to and approved by the Chief of Engineers, United States  
25 Army, and by the Secretary of the Army, and when such



1 plans have been approved by the Chief of Engineers and  
2 by the Secretary of the Army, there shall be no deviation  
3 from such plans either before or after completion of said dam  
4 unless the modification of such plans has previously been  
5 submitted to and approved by the Chief of Engineers and  
6 the Secretary of the Army. In approving the plans for said  
7 dam such conditions and stipulations may be imposed as the  
8 Chief of Engineers and the Secretary of the Army may deem  
9 necessary to protect the present and future interest of the  
10 United States. Nothing in this section shall be construed to  
11 authorize the use of such dam to develop water power or  
12 generate hydroelectric energy. The grantee and its suc-  
13 cessors shall hold and save the United States free from  
14 all claims arising from damage which may be sustained by  
15 the dam herein authorized, or damage sustained by the ap-  
16 purtenances of the said dam, by reason of the future con-  
17 struction and operation by the United States of Hartwell  
18 Reservoir or any other Federal project upstream or down-  
19 stream from the dam herein authorized. The authority  
20 granted by this section shall cease and be deemed null and  
21 void unless the actual construction of the dam hereby author-  
22 ized is commenced within four years and completed within  
23 seven years from the date of approval of this section. The  
24 right to alter, amend, or repeal this section is hereby ex-  
25 pressly reserved.

1        SEC. 206. The Secretary of the Army is hereby author-  
2 ized and directed to cause surveys for flood control and allied  
3 purposes, including channel and major drainage improve-  
4 ments, and floods aggravated by or due to wind or tidal  
5 effects, to be made under the direction of the Chief of Engi-  
6 neers, in drainage areas of the United States and its terri-  
7 torial possessions, which include the following named local-  
8 ities: *Provided*, That after the regular or formal reports  
9 made on any survey are submitted to Congress, no supple-  
10 mental or additional report or estimate shall be made unless  
11 authorized by law except that the Secretary of the Army  
12 may cause a review of any examination or survey to be made  
13 and a report thereon submitted to Congress, if such review  
14 is required by the national defense or by changed physical  
15 or economic conditions: *Provided further*, That the Govern-  
16 ment shall not be deemed to have entered upon any project  
17 for the improvement of any waterway or harbor mentioned  
18 in this title until the project for the proposed work shall  
19 have been adopted by law:

20            Waccasassa River (Levy County and Gilchrist  
21 County), Florida.

22            Valenciana River, Puerto Rico.

23            Lake Pontchartrain, north shore, Louisiana.

24            San Bernard River, Texas.

25            Clear Creek, Texas.



1           Peytons Creek and tributaries, Texas.

2           Sacramento River Basin and streams in northern  
3 California draining into the Pacific Ocean for the pur-  
4 poses of developing, where feasible, multiple-purpose  
5 water resource projects, particularly those which would  
6 be eligible under the provisions of title III of Public  
7 Law 85-500.

8           Battle Creek, Sacramento River, California.

9           All streams in Santa Barbara County, California,  
10 draining the Santa Ynez Mountains, except Santa Ynez  
11 River and tributaries.

12       SEC. 207. Title II of this Act may be cited as the "Flood  
13 Control Act of 1962".

Passed the House of Representatives October 3, 1962.

Attest:

RALPH R. ROBERTS,

*Clerk.*

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## AN ACT

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Authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

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OCTOBER 4, 1962

Received; read twice, considered, amended, read  
the third time, and passed



Mr. SMITH of Massachusetts. Mr. President, I would be happy to yield if I had any time remaining.

The PRESIDING OFFICER. The time of the Senator from Massachusetts has expired.

The Senator from Oregon has 1 minute remaining.

Mr. MORSE. Mr. President, in the 1 minute which remains available to me, I must answer the Senator from Massachusetts.

I must say that all of the program the Senator from Massachusetts has outlined would be a part of the program under the amendment I am offering. Let us not forget that my amendment is for the program which has been unanimously recommended by the District of Columbia Board of Education and the Superintendent of Schools of the District of Columbia. Many of the requests are justified by the Strayer survey in 1949. The Strayer survey shows what a crisis there is in the educational system in the District of Columbia.

The question is whether Congress will authorize the borrowing of the money needed to construct the facilities which are required in order to provide the necessary assistance and facilities to the schoolchildren of the District of Columbia, and to do it now, and then to proceed to work our way toward paying back the money during the next 10 years.

I wish to say that from the standpoint of the human values involved, and from the standpoint of the social conditions existing in the District of Columbia, we cannot afford to try to save money.

The PRESIDING OFFICER. Under the unanimous-consent agreement, all available time on the amendment of the Senator from Oregon has expired.

The question is on agreeing to the amendment of the Senator from Oregon. On this question, the yeas and nays have been ordered; and the clerk will call the roll.

The legislative clerk called the roll.

Mr. HUMPHREY. I announce that the Senator from Colorado [Mr. CARROLL], the Senator from New Mexico [Mr. CHAVEZ], the Senator from Pennsylvania [Mr. CLARK], the Senator from Mississippi [Mr. EASTLAND], the Senator from California [Mr. ENGLE], the Senator from Tennessee [Mr. GORE], the Senator from Michigan [Mr. HART], the Senator from Alabama [Mr. HILL], the Senator from Tennessee [Mr. KEFAUVER], the Senator from Washington [Mr. MAGNUSON], the Senator from Minnesota [Mr. MCCARTHY], and the Senator from Michigan [Mr. McNAMARA] are absent on official business.

I further announce that the Senator from Arkansas [Mr. FULBRIGHT], the Senator from Alaska [Mr. GRUENING], the Senator from Wyoming [Mr. HICKLEY], and the Senator from Missouri [Mr. LONG], are necessarily absent.

On this vote, the Senator from Colorado [Mr. CARROLL] is paired with the Senator from Utah [Mr. BENNETT]. If present and voting, the Senator from Colorado would vote "yea," and the Senator from Utah would vote "nay."

On this vote, the Senator from Pennsylvania [Mr. CLARK] is paired with the Senator from Indiana [Mr. CAPEHART]. If present and voting, the Senator from Pennsylvania would vote "yea," and the Senator from Indiana would vote "nay."

On this vote, the Senator from Tennessee [Mr. KEFAUVER] is paired with the Senator from South Dakota [Mr. BORTUM]. If present and voting, the Senator from Tennessee would vote "yea," and the Senator from South Dakota would vote "nay."

On this vote, the Senator from Alaska [Mr. GRUENING] is paired with the Senator from Minnesota [Mr. MCCARTHY]. If present and voting, the Senator from Alaska would vote "yea," and the Senator from Minnesota would vote "nay."

On this vote, the Senator from Michigan [Mr. HART] is paired with the Senator from Idaho [Mr. JORDAN]. If present and voting, the Senator from Michigan would vote "yea," and the Senator from Idaho would vote "nay."

On this vote, the Senator from Michigan [Mr. McNAMARA] is paired with the Senator from Kansas [Mr. PEARSON]. If present and voting, the Senator from Michigan would vote "yea," and the Senator from Kansas would vote "nay."

Mr. KUCHEL. I announce that the Senator from Vermont [Mr. AIKEN], the Senator from Utah [Mr. BENNETT], the Senator from South Dakota [Mr. BORTUM], the Senator from Indiana [Mr. CAPEHART], the Senator from Arizona [Mr. GOLDWATER], the Senator from Idaho [Mr. JORDAN], the Senator from Kentucky [Mr. MORTON], the Senator from Kansas [Mr. PEARSON], and the Senator from Texas [Mr. TOWER] are necessarily absent.

The Senator from Iowa [Mr. HICKENLOOPER] is absent by leave of the Senate.

The Senator from Colorado [Mr. ALLOTT] is absent by leave of the Senate on official business as a U.S. representative to the General Assembly of the United Nations.

The Senator from New Hampshire [Mr. MURPHY] is detained on official business. If present and voting, the Senator from Colorado [Mr. ALLOTT], the Senator from Arizona [Mr. GOLDWATER], and the Senator from Texas [Mr. TOWER] would each vote "nay."

On this vote, the Senator from Utah [Mr. BENNETT] is paired with the Senator from Colorado [Mr. CARROLL]. If present and voting, the Senator from Utah would vote "nay," and the Senator from Colorado would vote "yea."

On this vote, the Senator from South Dakota [Mr. BORTUM] is paired with the Senator from Tennessee [Mr. KEFAUVER]. If present and voting, the Senator from South Dakota would vote "nay," and the Senator from Tennessee would vote "yea."

On this vote, the Senator from Indiana [Mr. CAPEHART] is paired with the Senator from Pennsylvania [Mr. CLARK]. If present and voting, the Senator from Indiana would vote "nay," and the Senator from Pennsylvania would vote "yea."

On this vote, the Senator from Idaho [Mr. JORDAN] is paired with the Senator

from Michigan [Mr. HART]. If present and voting, the Senator from Idaho would vote "nay," and the Senator from Michigan would vote "yea."

On this vote, the Senator from Kansas [Mr. PEARSON] is paired with the Senator from Michigan [Mr. McNAMARA]. If present and voting, the Senator from Kansas would vote "nay," and the Senator from Michigan would vote "yea."

The result was announced—yeas 22, nays 50, as follows:

[No. 307 Leg.]

YEAS—22

Bartlett	Long, Hawaii	Randolph
Burdick	Long, La.	Symington
Case	McGee	Wiley
Dodd	Metcalf	Williams, N.J.
Douglas	Morse	Yarborough
Fong	Neuberger	Young, Ohio
Humphrey	Pastore	
Javits	Proxmire	

NAYS—50

Anderson	Hartke	Muskie
Beall	Hayden	Pell
Bible	Holland	Prouty
Boggs	Hruska	Robertson
Bush	Jackson	Russell
Butler	Johnston	Saltonstall
Byrd, Va.	Jordan, N.C.	Scott
Byrd, W. Va.	Keating	Smathers
Cannon	Kerr	Smith, Mass.
Carlson	Kuchel	Smith, Maine
Church	Lausche	Sparkman
Cooper	Mansfield	Stennis
Cotton	McClellan	Talmadge
Curtis	Miller	Thurmond
Dirksen	Monroney	Williams, Del.
Ellender	Moss	Young, N. Dak.
Ervin	Mundt	

NOT VOTING—28

Aiken	Fulbright	Long, Mo.
Allott	Goldwater	Magnuson
Bennett	Gore	McCarthy
Bortum	Gruening	McNamara
Capehart	Hart	Morton
Carroll	Hickenlooper	Murphy
Chavez	Hickey	Pearson
Clark	Hill	Tower
Eastland	Jordan, Idaho	
Engle	Kefauver	

So Mr. MORSE's amendment was rejected.

Mr. SMITH of Massachusetts. Mr. President, I move to reconsider the vote by which the amendment was rejected.

Mr. MANSFIELD. Mr. President, I move to lay that motion on the table.

Mr. BEALL. Mr. President, I move to lay that motion on the table.

The PRESIDING OFFICER. The question is on agreeing to the motion to lay on the table the motion to reconsider.

The motion to lay on the table was agreed to.

The PRESIDING OFFICER. Under the unanimous-consent agreement, no further amendments to the bill are in order. The question is on the engrossment and third reading of the bill.

The bill (S. 3313) was ordered to be engrossed for a third reading, was read the third time and passed, as follows:

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That subsection (b) of section 1 of the Act entitled "An Act to authorize the Commissioners of the District of Columbia to borrow funds for capital improvement programs and to amend provisions of law relating to Federal Government participation in meeting costs of maintaining the Nation's Capital City", approved June 6, 1958 (72 Stat. 183), be amended by striking "\$75,000,000" and inserting in lieu thereof "\$150,000,000".*



Sec. 2. Subsection (f) of section 1 of such Act is amended by striking out "June 30, 1968" and inserting in lieu thereof "June 30, 1972".

#### ADMINISTRATION OF PUBLIC ASSISTANCE IN THE DISTRICT OF COLUMBIA

Mr. MANSFIELD obtained the floor. Mr. MORSE. Mr. President, may I have the attention of the majority leader a moment?

Mr. MANSFIELD. Yes.

Mr. MORSE. At the pleasure of the majority leader I should like to ask for consideration of amendments of the House of Representatives to S. 914. I should like to have the Senate accept the House amendments.

Mr. MANSFIELD. The Senator may do so now.

Mr. MORSE. I ask that the Presiding Officer lay before the Senate the amendments of the House of Representatives to the bill S. 914.

The PRESIDING OFFICER laid before the Senate the amendments of the House of Representatives to the bill (S. 914) to provide for more effective administration of public assistance in the District of Columbia; to make certain relatives responsible for support of needy persons, and for other purposes, which were, on page 1, line 4, strike out "1961", and insert "1962"; on page 2, strike out line 8; on page 2, strike out line 9, over through and including line 8, on page 3, and insert:

#### CATEGORIES AND ADMINISTRATION OF PUBLIC ASSISTANCE

Sec. 3. (a) The following categories of public assistance are hereby established:

- (1) Old Age Assistance;
- (2) Aid to the Blind;
- (3) Aid to the Disabled;
- (4) Aid to Dependent Children;
- (5) General Public Assistance.

(b) This Act shall be administered by the Commissioners who shall—

(1) provide for maximum cooperation with other agencies rendering services to maintain and strengthen family life and to help applicants for public assistance and recipients to attain self-support or self-care;

(2) establish and enforce such rules and regulations as may be necessary or desirable to carry out the provisions of this Act;

(3) cooperate in all necessary respects with agencies of the United States Government in the administration of this Act, and accept any funds, goods, or services payable to the District for public assistance and for administering public assistance;

(4) enter into reciprocal agreements with any State relative to the provision of public assistance to residents and nonresidents.

On page 3, lines 18 and 19, strike out "the Commissioners pursuant to this Act" and insert "this Act: *Provided*, That no persons shall be eligible for old-age assistance established by category number 1, subsection (a) of section 3 of this Act, unless he has resided in the District for five years or more within the nine years immediately preceding application for such assistance, and who has resided continuously therein for one year immediately preceding the said application"; on page 4, strike out lines 3 through 6, inclusive; on page 4, line 7, strike out "on July 1, 1961" and insert

"upon enactment"; on page 6, line 16, strike out "sixty" and insert "thirty"; on page 6, line 20, after "necessary" insert ", but in every case the Commissioners shall make such reconsiderations at least once in each year"; on page 10, line 2, after "entitled" insert ", or in excess of that to which he is entitled"; on page 10, line 3, after "sum" insert ", or if continued on assistance, shall have future grants proportionately reduced until the excess amount received has been repaid"; and on page 10, line 16, strike out "medical assistance for the aged".

Mr. MORSE. Mr. President, the amendments of the House of Representatives are acceptable. I move that the Senate concur in the House amendments.

The PRESIDING OFFICER. The question is on agreeing to the motion by the Senator from Oregon.

The motion was agreed to.

#### INDECENT PUBLICATIONS IN THE DISTRICT OF COLUMBIA—CONFERENCE REPORT

Mr. HARTKE. Mr. President, I submit a report of the committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H.R. 4670) to amend the law relating to indecent publications in the District of Columbia. I ask unanimous consent for the present consideration of the report.

The PRESIDING OFFICER. The report will be read for the information of the Senate.

The legislative clerk read the report.

(For conference report, see House proceedings of October 3, 1962, p. 20729, CONGRESSIONAL RECORD.)

The PRESIDING OFFICER. Is there objection to the present consideration of the report?

There being no objection, the Senate proceeded to consider the report.

Mr. HARTKE. Mr. President, I move that the Senate agree to the conference report.

The PRESIDING OFFICER. The question is on agreeing to the motion by the Senator from Indiana.

The motion was agreed to.

#### FLOOD CONTROL ACT OF 1962

Mr. MANSFIELD. Mr. President, I move that the Senate proceed to the consideration of Calendar No. 2220, S. 3773.

The PRESIDING OFFICER. The bill will be stated by title for the information of the Senate.

The LEGISLATIVE CLERK. A bill (S. 3773) authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

The PRESIDING OFFICER. The question is on agreeing to the motion by the Senator from Montana.

The motion was agreed to; and the Senate proceeded to consider the bill.

Mr. KERR. Mr. President, the Senate has before it today what I believe to

be the second largest public works authorization in history. The bill includes projects for water resources development, flood control, power generation, navigation, beach erosion, and hurricane protection.

Many of the projects include reservoirs for the storage of municipal and industrial water supplies. This is in accordance with the Water Supply Act of 1958. In addition, consideration has been given to, and provision made for, capacity for water to provide quality control and to aid in alleviating the problem of pollution of our streams and waterways. This program has only now been initiated because authority was first provided through amendments in 1961 to the Water Pollution Control Act. These purposes are, of course, in addition to the regular programs to control floods, develop power, improve navigation, and protect our shores.

The Public Works Committee feels that these projects will constitute a prudent investment of Federal funds in permanent improvements believed to be sound from an engineering standpoint, and economically feasible. I would like to point out that the Federal investment in certain multipurpose features of many of the projects will be reimbursed to the Treasury.

The total amount of monetary authorization in the bill, broken down into the major categories is indicated in a table which appears on page 6 of the report.

Mr. President, I ask unanimous consent that the table may be printed in the RECORD at this point.

There being no objection, the table was ordered to be printed in the RECORD, as follows:

#### Monetary summary of bill (cost of new work)

##### TITLE I.—RIVERS AND HARBORS

Sec. 101:	
Navigation projects (13)----	\$376,498,800
Beach-erosion control projects (11)-----	4,875,000
Monetary authorization (1)-----	1,000,000
Sec. 105: Illinois and Mississippi Canal (1)-----	800,000
Sec. 107: Lock and dam No. 3, Big Sandy River, Ky. (1)---	200,000

Total, title I (86)----- 383,373,800

##### TITLE II.—FLOOD CONTROL

Sec. 203:	
New projects or project modifications (106)-----	2,199,492,500
Increased basin authorizations (10)-----	804,000,000
Sec. 204: Snettisham project, Alaska (1)-----	41,634,000
Sec. 205: Waurika project, Oklahoma (1)-----	25,019,500
Sec. 211: Missouri River Basin, Department of the Interior (1)-----	100,000,000

Total, title II (119)--- 3,170,146,000

Grand total of bill (205)----- 3,553,519,800

Mr. KERR. Mr. President, I have a series of amendments which I will offer to S. 3773 which will have the effect of bringing into this bill many of the provisions contained in the House bill, H.R. 13273, which I feel should be accepted by the Senate.



Mr. President, I offer the amendment of which I send to the desk and ask to have stated.

The PRESIDING OFFICER. The amendments will be stated for the information of the Senate.

The LEGISLATIVE CLERK. On page 4, between lines 11 and 12, it is proposed to insert the following:

Newark Bay, Hackensack and Passaic Rivers, New Jersey (channels to Port Elizabeth): Modification of the existing navigation project authorized by the River and Harbor Act of 1954 (Public Law 780, 83d Congress), House Document No. 252, is hereby authorized substantially in accordance with the plans being prepared by the Chief of Engineers, subject to the the approval of such plans by the Secretary of the Army and the President;

On page 6, between lines 2 and 3, it is proposed to insert the following:

Holt lock and dam, Alabama: The Secretary of the Army is hereby authorized and directed to cause an immediate study to be made under the direction of the Chief of Engineers with a view to providing hydroelectric power generating facilities in said dam, and his report on such study shall be submitted to the Congress by the Secretary of the Army within the first period of ninety calendar days of continuous session of the Eighty-eighth Congress;

On page 13, between lines 10 and 11, it is proposed to insert the following:

Fire Island Inlet and shore westerly to Jones Inlet, Long Island, New York: Modification of the existing beach erosion control project authorized by the River and Harbor Act of 1958 (Public Law 500; Eighty-fifth Congress), House Document Numbered 411, Eighty-fifth Congress, is hereby authorized substantially in accordance with the plans, which will include a sand bypassing system at Fire Island Inlet, being prepared by the Chief of Engineers, subject to the approval of such plans by the Secretary of the Army and the President;

On page 18, between lines 17 and 18, it is proposed to insert the following:

SEC. 105. The Secretary of the Army is authorized to convey 17.94 acres of land located at old lock and dam numbered 7, Ohio River, to the city of Midland, Pennsylvania, after November 1, 1962, for public park and recreation purposes, without monetary consideration but subject to reversion to the United States if not utilized for public park and recreation purposes and further subject to such flowage rights as may be necessary in the operation of the New Cumberland lock and dam, Ohio River.

On page 18, line 18, it is proposed to strike out "SEC. 105." and to insert in lieu thereof "SEC. 106."

On page 19, line 6, it is proposed to strike out "SEC. 106." and to insert in lieu thereof "SEC. 107."

On page 19, line 15, it is proposed to strike out "SEC. 107." and to insert in lieu thereof "SEC. 108."

On page 20, between lines 3 and 4, it is proposed to insert the following:

SEC. 109. The body of water designated as the Redondo Beach Harbor, California, shall be known and designated hereafter as the Redondo Beach King Harbor, California. Any law, regulation, map, document, record, or other paper of the United States in which such body of water is referred to shall be held to refer to it as the Redondo Beach King Harbor, California.

On page 20, line 4, it is proposed to strike out "SEC. 108." and to insert in lieu thereof "SEC. 110."

On page 20, line 24, it is proposed to strike out "SEC. 109." and to insert in lieu thereof "SEC. 111."

On page 31, between lines 9 and 10, it is proposed to insert the following:

The project for flood control and improvement of the lower Mississippi River, adopted by the Act of May 15, 1928, as amended, is hereby modified and expanded to include construction of certain improvements in Gin and Muddy Bayous, Yazoo River Basin, Mississippi, substantially in accordance with plans on file in the Office, Chief of Engineers, subject to the approval of such plans by the Secretary of the Army and the President, at an estimated cost of \$150,000.

On page 31, between lines 20 and 21, it is proposed to insert the following:

The lower auxiliary channel, Yazoo River Basin, Mississippi, a unit in the Mississippi River and tributaries project; shall hereafter be known and designated as the Will M. Whittington Auxiliary Channel in honor of the late Member of the House of Representatives from the Third District of Mississippi, and former chairman of the House Public Works Committee. The Secretary of the Army, acting through the Chief of Engineers, U.S. Army, is hereby authorized and directed to erect appropriate markers along the auxiliary channel designating the project "The Will M. Whittington Auxiliary Channel." Any law, regulation, document, or record of the United States in which such project is designated or referred to under the name of lower auxiliary channel, Yazoo River Basin, Mississippi, shall be held and considered to refer to such project by the name of "Will M. Whittington Auxiliary Channel."

On page 33, between lines 6 and 7, it is proposed to insert the following:

The project for the San Gabriel River, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 602 Eighty-seventh Congress, at an estimated cost of \$20,250,000.

On page 44, between lines 13 and 14, it is proposed to insert the following:

The project for the Saline River and tributaries, Illinois, authorized by the Flood Control Act of 1958 (Public Law 85-500) is hereby modified to authorize the Chief of Engineers to adjust the cash contribution required of local interests to such amount as is recommended by the Secretary of the Army and approved by the President.

The PRESIDING OFFICER. Does the Senator from Oklahoma wish to have the amendments considered en bloc?

Mr. KERR. Mr. President, I ask unanimous consent that the amendments may be considered en bloc.

The PRESIDING OFFICER. Is there objection to the request by the Senator from Oklahoma? The Chair hears none; and, without objection, the amendments will be considered en bloc.

Mr. KERR. Mr. President, I ask unanimous consent to have printed in the RECORD specific language from the House report with reference to the language in the House bill concerning each of the projects with reference to which the amendments would provide modifications.

There being no objection, the excerpts were ordered to be printed in the RECORD, as follows:

NEWARK BAY, HACKENSACK AND PASSAIC RIVERS, NEW JERSEY (CHANNELS TO PORT ELIZABETH)

Location: Newark Bay is an estuary extending southerly from the confluence of the Hackensack and Passaic Rivers to the New York and New Jersey channels. Hackensack River rises in Rockland County, N.Y., and flows generally south about 45 miles into Newark Bay. Passaic River rises in north-eastern New Jersey and flows about 80 miles east and south into Newark Bay.

Authority: Resolutions of the Public Works Committee of the U.S. Senate and House of Representatives adopted June 14, 1960, and July 31, 1957, respectively.

Existing project: There is no existing Federal project for channels to Port Elizabeth on the west side of Newark Bay. The existing Federal project channels in Newark Bay, Hackensack and Passaic Rivers connect directly or indirectly with all major channels and water routes within the port of New York as well as all inland coastal and ocean routes served by the port. Approach from the Atlantic Ocean is afforded through Ambrose and Anchorage channels which have controlling depths of 45 feet and the New York and New Jersey channels which have controlling depths of 35 feet.

Navigation flood problem: Local interests request that the channels to Port Elizabeth be incorporated in the Federal navigation project for Newark Bay, Hackensack and Passaic Rivers and assumption by the Federal Government of maintenance of the channels to Port Elizabeth.

Recommended plan of improvement: Modification of the existing project for Newark, Hackensack and Passaic Rivers, N.J., to provide for Federal maintenance to a depth of 35 feet of the channels to Port Elizabeth which have been or are planned to be dredged by the Port of New York Authority or other responsible agency.

Costs and project economics: Based on data in the district engineer's report there are no Federal construction costs for the project. Federal cost for maintenance of the channels is estimated at \$230,500 annually. Benefits, based on anticipated savings over a 50-year period have not been completely evaluated; however, since the commerce to the port is anticipated to exceed 8 million tons annually, savings in the order of 2½ cents per ton would be required for its justification. Benefits resulting from provision of the improvement are expected to exceed this figure. The studies made of this project to date indicate that the benefit-cost ratio will be in the order of 2 to 1.

Status: The review report of the district engineer was submitted to the Board of Engineers for Rivers and Harbors for consideration in accordance with existing law. The Board returned the report to the reporting officers for reconsideration relative to the benefit analysis. Accordingly, the report has not been completed and reviewed in accordance with established procedures.

Remarks: The committee has noted that maintenance of the general navigation channels to Port Elizabeth is needed to meet the growing needs of existing and prospective deep-draft commercial traffic moving into the port. Federal assumption of the maintenance cost is justified and is in keeping with that provided in similar projects throughout the Nation.

FIRE ISLAND INLET AND SHORE WESTERLY TO JONES INLET, N.Y., BEACH EROSION CONTROL

Location: The study area is located on the south shore of Long Island, N.Y., and extends a distance of about 15 miles between Fire Island Inlet and Jones Inlet.



Report authorized by: Section 2 of the River and Harbor Act approved July 3, 1930 (cooperative study provisions).

Existing project: The existing Federal beach erosion project authorized July 3, 1958, provides for Federal participation in restoration and protection of the shore from Oak Beach at Fire Island Inlet to Jones Inlet consisting of three dredging operations over a project life of 15 years. The existing Federal navigation project authorized by the River and Harbor Act of 1950 provides a channel through Fire Island Inlet generally 10 feet deep and 250 feet wide, and a 5,000-foot jetty at the west end of Fire Island.

Beach erosion control problem: Continuing erosion of the protective and recreational beach in the study area has progressed in recent years to such an extent that use of the beach is impaired and improvements in the shore-front areas are damaged by storms and subject to possible destruction. Presently authorized protection improvements are inadequate to provide the protection required under existing conditions. The westerly movement of littoral drift into the inlet results in shoaling and shifting of the channel and in the possibility of eventual closure of the inlet unless littoral drift is stopped or bypassed.

Considered plans of improvement: Provide for Federal participation in the construction of a long-term solution of the erosion problem consisting generally of either an offshore breakwater or a jetty extension to trap littoral drift, placement of sand to restore the beach, provision of feeder beach areas to nourish down-drift shores, and periodic transfer of sand from lee of the breakwater or jetty to feeder beaches.

Project cost and economics: At this time the Chief of Engineers is unable to determine definitely costs or economic justifications for the long-term plans. However, studies have advanced sufficiently to indicate that protective measures are warranted and that the anticipated benefits will probably exceed the cost.

Status: The review report of the district engineer has not been completed and reviewed in accordance with established procedures. A preliminary report was submitted by the district engineer, New York district on July 6, 1962, and forwarded by the division engineer on the same date to the Chief of Engineers.

Remarks: The committee has noted that the erosion problem on the south shore of Long Island from Fire Island Inlet to Jones Inlet has been aggravated by the storms of March 1962. The erosion and silting of the inlets is a continuing problem and early solution and remedial measures are essential. It is also noted that unless littoral drift is stopped or bypassed, the inlet eventually may be closed.

#### GIN BAYOU, YAZOO RIVER, MISS.

Gin Bayou drains an area of about 2 square miles before it traverses the campus of the Mississippi Vocational College. It is a tributary of Muddy Bayou which in turn is a tributary of Quiver River.

Gin and Muddy Bayous have inadequate channel capacities due to obstructions caused by vegetation. In addition, road crossings have inadequate culverts resulting in severe flooding of the campus of the Mississippi Vocational College during periods of heavy rainfall.

In view of the severe damages suffered by the Mississippi Vocational College the committee has seen fit to include language in the bill authorizing a project which is designed to alleviate the present flood and drainage problem.

#### SAN GABRIEL RIVER WATERSHED, TEXAS

(H. Doc. 591, 87th Cong.)

Location: The San Gabriel River watershed is in east-central Texas immediately north of Austin. The river, formed by the confluence of the North Fork and South Fork

at Georgetown, Tex., flows eastward about 62 miles to its junction with Little River, a tributary of Brazos River.

Authority: Resolution of the House Committee on Public Works, adopted July 29, 1955.

Existing project: The authorized, but un-

constructed, Laneport Dam and Reservoir at mile 29.7 on San Gabriel River is one of eight such projects in the Brazos River Basin planned to operate as a system for flood control and other water-related purposes. Pertinent data relative to the other seven reservoirs are given in the following tabulation:

Project	Stream	Status
Whitney.....	Brazos River.....	In operation.
Belton.....	Leon River.....	Do.
Waco.....	Bosque River.....	Under construction.
Proctor.....	Leon River.....	Do.
Stillhouse Hollow.....	Lampasas River.....	Planning underway.
Ferguson.....	Navasota River.....	Not started.
Somerville.....	Yegua Creek.....	Planning underway.

Problems: Floods occur on the San Gabriel River at any time of the year and contribute substantially to flooding in the lower Brazos River. During the 48-year period, 1903 to 1950, inclusive, 25 floods occurred. The parts of the Little River and Brazos River flood plains affected by floodflows from San Gabriel River consist of about 1,080,000 acres, of which 598,000 are improved agricultural lands, 480,000 acres are unimproved grazing lands, and 2,552 acres are in several communities along the reach. The value of property in these reaches, based on July 1961 prices, is estimated at over \$350 million. Average annual damages in the reaches, assuming none of the eight authorized projects in operation, are estimated at \$9,703,300. Construction and operation of the eight authorized reservoirs would prevent average annual damages estimated at \$4,117,000.

In connection with the studies for this report, the U.S. Public Health Service prepared a report on the alternative cost of conservation storage and on the existing and future needs of municipal and industrial water supply in the area which could be served by storage in the San Gabriel River watershed. The service area extends from the vicinity of Waco to the Freeport-Velasco area, generally within the Brazos River Basin. The report shows that the usage in the service area in 1958 was about 228 million gallons per day and that the needs in the year 2010, exclusive of return flow for reusage, is esti-

mated at 1,102 million gallons per day. In comparison, the report shows the estimated yield from existing and proposed sources (exclusive of the reservoirs being covered in this report) to meet the need in the year 2010 as 603 million gallons per day, including 117 million gallons per day from ground water.

Recommended plan of improvement: The plan of improvement consists of the authorized Laneport Reservoir, which would be modified under existing authority and applicable laws and policies, together with the addition of two recommended upstream reservoirs to be operated in conjunction with Laneport, all to serve the primary purposes of flood control, water supply, fish and wildlife, and recreation. The recommendations of the Chief of Engineers permit discretion regarding the sequence of construction of the authorized Laneport Reservoir and the recommended North Fork and South Fork Reservoirs. Under the plan, the first cost of Laneport Reservoir would be \$25,200,000 compared to a cost of \$28,700,000 as now estimated, such decrease being the result of certain economies in design and construction now proposed. Also, since local interests would be required to reimburse the United States for project costs allocated to water supply, currently estimated at \$10,185,000, the net cost to the United States for Laneport Reservoir would be \$15,014,000, or \$13,165,200 less than now estimated.

Estimated cost (price level of July 1961):

Cost	Reservoir		Total
	North Fork	South Fork	
Federal.....	\$12,600,000	\$7,650,000	\$20,250,000

#### Project economics

	Reservoir		Total
	North Fork	South Fork	
Annual charges:			
Interest and amortization.....	\$473,700	\$287,900	\$761,600
Operation, maintenance, and replacement.....	70,300	64,000	134,300
Total.....	544,000	351,900	895,900
Annual benefits:			
Flood control.....	582,500	274,300	856,800
Water supply.....	512,800	273,000	785,800
Fish and wildlife.....	19,300	19,000	38,300
Recreation.....	351,700	290,000	641,700
Total.....	1,466,300	856,300	2,322,600
Benefit-cost ratio.....	2.7	2.4	2.0

Local cooperation: Pay the United States in accordance with the Water Supply Act of 1958, as amended, the first costs and the annual operation, maintenance, and replacement costs allocated to municipal and industrial water supply storage, presently estimated at \$10,077,000 and \$62,500, respectively, for the ultimate development; and

hold and save the United States free from all water-rights claims resulting from construction and operation of the projects.

Comments of State and Federal agencies: Department of the Interior: Favorable.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.



Federal Power Commission: Favorable.  
 Department of Agriculture: No comment.  
 State of Texas: Favorable.  
 Comments of the Bureau of the Budget:  
 No objection.

Mr. KERR. In support of the amendments, Mr. President, I wish to say that they relate to approximately \$20 million worth of projects which are in the House bill.

However, they provide a basis for reimbursement or participation by the local units which is not acceptable to the Bureau of the Budget. The amendments as introduced have been cleared with the Bureau of the Budget and the Corps of Engineers, and provide language with reference to each of the affected projects approved by the Budget and recommended by the Corps of Engineers. I ask that the amendments be considered en bloc.

The PRESIDING OFFICER. Is there objection to the request of the request of the Senator from Oklahoma? The Chair hears none, and it is so ordered.

Mr. PROXMIRE. Mr. President, will the Senator yield?

Mr. KERR. I yield.

Mr. PROXMIRE. I misunderstood the Senator. I was a little confused in the Senator's presentation. Did the Senator say that the Budget Bureau approves the amendments or disapproves them with reservations?

Mr. KERR. It approves them without reservation.

Mr. PROXMIRE. I thank the Senator.

The PRESIDING OFFICER. The question is on agreeing to the amendments offered by the Senator from Oklahoma.

The amendments were agreed to.

Mr. KERR. Mr. President, I send to the desk an amendment on page 17, line 3, of the bill, and an amendment on page 17, line 22 and line 24 of the bill.

The PRESIDING OFFICER. The amendments of the Senator from Oklahoma will be stated.

The CHIEF CLERK. On page 17, line 3, it is proposed to delete "heretofore or"; and on page 17, line 22, after the word "protection", delete the remainder of line 22 and 23, and to "and" on line 24.

Mr. KERR. Mr. President, the purpose of the amendment is to conform our authorization to an amendment to the future authorization provision in the bill in order to eliminate the objection made on the floor of the House in the form of a point of order against language in the House bill which was similar to the language in the Senate bill. With those amendments, the language would not then be subject to a point of order.

The PRESIDING OFFICER. The question is on agreeing to the amendments offered by the Senator from Oklahoma.

The amendments were agreed to.

Mr. KERR. Mr. President, I understand that the distinguished Senators from Hawaii [Mr. FONG and Mr. LONG] wish to propose an amendment.

Mr. LONG of Hawaii. Mr. President, on behalf of my colleague [Mr. FONG] and myself, I propose an amendment on page 13, between lines 6 and 7.

The PRESIDING OFFICER. The amendment offered by the Senator from Hawaii will be stated.

The CHIEF CLERK. On page 13, between lines 6 and 7 it is proposed to insert the following:

The project for Hilo Harbor, Hawaii, authorized by Public Law 645, 86th Congress, is hereby modified to provide for adjustment of the cash contribution required of local interests in accordance with recommendations by the Secretary of the Army and approved by the President.

The PRESIDING OFFICER. The question is on agreeing to the amendment offered by the Senator from Hawaii [Mr. LONG] for himself and his colleague [Mr. FONG].

The amendment was agreed to.

Mr. KERR. Mr. President, I understand that the Senator from Arkansas wishes to propose amendments.

Mr. McCLELLAN. Mr. President, I offer amendments which I send to the desk and ask to have stated.

The PRESIDING OFFICER. The amendments of the Senator from Arkansas will be stated.

The CHIEF CLERK. On page 73, between lines 12 and 13, it is proposed to insert the following:

SEC. 212. The Secretary of the Army acting through the Corps of Engineers is hereby authorized to replace with adequate floodway capacity the bridge over Boeuf River, Chicot County, Arkansas, approximately three miles north of the county line, and the bridge over Big Bayou, Chicot County, Arkansas, approximately two miles upstream from its confluence with the Boeuf River, which were altered as part of the project for Boeuf and Tensas Rivers and Bayou Macon, authorized by the Flood Control Act of December 22, 1944, and which were recently destroyed by floods, at an estimated cost of \$115,000.

On page 73, line 13, strike out "Sec. 212." and insert in lieu thereof "Sec. 213."

Mr. McCLELLAN. Mr. President, I have discussed the amendments with the distinguished chairman of the committee. I believe he is familiar with them. I ask unanimous consent to have printed at this point in the RECORD a statement I have prepared in support of the amendments.

There being no objection, the statement was ordered to be printed in the RECORD, as follows:

The purpose of my amendment is to authorize the Corps of Engineers to replace two bridges on roads in Chicot County Ark., that that have recently been washed away. The first of these bridges is over Big Bayou and the second is over the Boeuf River. These bridges were modified by the Corps of Engineers as a part of the construction of channel improvements in the Boeuf and Tensas Basin project. The portion of this work in Chicot County was accomplished in the years 1953 through 1956.

The bridge modifications were never satisfactory, and as a result the two bridges have been washed away by the increased flow of water brought about by the upstream channel improvements. The Secretary of the

Army admits that the bridges were not properly altered by the Corps of Engineers—especially with regard to the size of the waterway openings—and the Department of the Army accepts full responsibility for replacement of the bridges.

The citizens of Chicot County have been greatly inconvenienced by the loss of these bridges. Furthermore, I understand that school buses have had to be rerouted in some instances and that the conditions are becoming quite critical as bad weather approaches. This is the nature of an emergency situation, and as I have said, the Department of the Army has provided a favorable report on this proposal. Because of the time element, I did not have an opportunity to bring it to the attention of the Public Works Committee when that committee was considering the bill that is before us. The total cost of the bridges would be only \$115,000, and I hope that the amendment will be adopted.

Mr. McCLELLAN. Mr. President, I also ask that there be printed at this point in the RECORD a letter from Secretary of the Army Cyrus R. Vance approving the proposed legislation and also stating that the Bureau of the Budget has no objection to it.

There being no objection, the letter was ordered to be printed in the RECORD, as follows:

SEPTEMBER 10, 1962.

HON. CHARLES A. BUCKLEY,  
 Chairman, Committee on Public Works,  
 House of Representatives.

DEAR MR. CHAIRMAN: Reference is made to your request to the Secretary of the Army for the views of the Department of the Army with respect to H.R. 9264, 87th Congress, a bill "to authorize the Secretary of the Army acting through the Chief of Engineers to replace certain bridges in Chicot County, Ark."

This bill would authorize the Secretary of the Army acting through the Chief of Engineers to replace with adequate floodway capacity the bridge over Boeuf River, Chicot County, Ark., approximately 3 miles north of the county line, and the bridge over Big Bayou, Chicot County, Ark., approximately 2 miles upstream from its confluence with the Boeuf River, which bridges were altered as part of the project for Boeuf and Tensas Rivers and Bayou Macon, authorized by the Flood Control Act of December 22, 1944, and which were recently destroyed by floods. The bill provides for an estimated cost of \$115,000.

The channel work in Chicot County, contemplated by the Boeuf and Tensas Rivers and Bayou Macon project, was accomplished in the years 1953 through 1956. Pursuant to contracts with Chicot County, the bridges over Big Bayou and Boeuf River were slightly extended during original project construction but were not modified to provide larger, clear waterway openings as envisioned in the original plan. Their short spans were not adequate to pass debris during flood flows in the channels and they were destroyed by the early spring floods of 1961. The contracts with Chicot County providing for extension of the two bridges include clauses releasing the Federal Government from all claims for damages due to the alteration of the structures and operation of the project. Accordingly, additional expenditure of Federal funds to construct the bridges to project dimensions would require congressional authorization.

Under ordinary circumstances, the Department of the Army would object to overriding such release clauses. However, in view of the Department of the Army's partici-



pation in the reconstruction of these bridges and the fact that they were not modified to provide larger waterway openings, this Department would interpose no objection to enactment of H.R. 9264.

The Bureau of the Budget advises that, from the standpoint of the administration's program, there is no objection to the presentation of this report for the consideration of the committee.

Sincerely yours,  
CYRUS R. VANCE,  
Secretary of the Army.

Mr. McCLELLAN. I wish to make a brief statement about the amendments. The amendments relate to a drainage project which the Federal Government is constructing. They involve bridges that have been destroyed by recent floods because inadequate space was left under the bridges for proper drainage and flowage. Damage has occurred. The State and county have given satisfactory assurances for maintenance after construction. The situation is an emergency. It has developed recently. A bill to correct the damage is pending in the House, but unless the amendments to the bill now pending are agreed to and the pending measure enacted the condition will continue into next year before it can be given attention.

A number of schools are affected by reason of the damage that has been caused. It ought to be promptly restored.

I trust that the distinguished chairman will agree to accept the amendments and take them to conference.

Mr. KERR. Mr. President, I think the amendments are justified. They involve authorization for the expenditure of \$115,000, which, in the opinion of the Senator from Oklahoma, would in reality be maintenance and operation expense. The amendments are acceptable to the Bureau of the Budget, and I urge adoption of the amendments.

The PRESIDING OFFICER. The question is on agreeing to the amendments of the Senator from Arkansas.

The amendments were agreed to.

Mr. McCLELLAN. I thank the distinguished Senator from Oklahoma.

Mr. DOUGLAS. Mr. President, will the Senator yield?

Mr. KERR. I yield for a question.

Mr. DOUGLAS. I should like to address an inquiry directed to page 42, lines 4 to 9, of the bill. The provision of the bill referred to apparently authorizes future expenditures of \$1,417,000 for flood protection on the Wabash River at or near Mount Carmel, Ill. I ask the Senator whether the proposed construction is for a levee on the Illinois side of the river to protect Mount Carmel against the diversion of water caused by the construction of levee No. 5 on the Indiana side of the river.

Mr. KERR. I am looking for the section.

Mr. DOUGLAS. It is listed on page 145 of the report. I have not found a description of it in the text. That is why I am trying to make the legislative history.

Mr. KERR. I refer to page 239 of the report:

WABASH RIVER AT MOUNT CARMEL  
(H. Doc. 573, 87th Cong.)

Location: Mount Carmel is on the west bank of the Wabash River in southeastern Illinois, about 35 miles southwest of Vincennes, Ind.

Mr. DOUGLAS. The construction would be on the west, or Illinois, bank of the Wabash.

Mr. KERR. The Senator is correct.

Mr. DOUGLAS. I thank the Senator from Oklahoma. The project is very desirable because Levee No. 5 on the Indiana side was authorized. Appropriations have been made for it. Unless we had counteracting levees on the Illinois side, the result would be to protect Indiana but at the expense of Illinois, with possible flooding of Mount Carmel and the adjacent farm lands. The measure is a very constructive one. I am happy to congratulate the Senator from Oklahoma and thank him for its inclusion in the bill.

Mr. KERR. I appreciate the remarks of the Senator from Illinois.

Mr. YARBOROUGH. Mr. President, I send an amendment to the desk and ask that it be stated.

The PRESIDING OFFICER. The amendment will be stated.

The CHIEF CLERK.

On page 37, insert the following language between lines 18 and 19:

The project for Sanders, Big Pine, and Collier Creeks, Texas, is hereby authorized substantially as recommended by the Chief of Engineers, at an estimated cost of \$16,100,000, subject to the recommendations of the Secretary of the Army and approval of the President.

Mr. YARBOROUGH. Mr. President, before briefly explaining my amendment, I wish to commend the distinguished Senator from Oklahoma for the care which he has given to this bill, consisting of 73 pages. He has worked on the bill up to the very closing days of the session. He has given to it meticulous care. I have studied the projects in Texas, and in most instances I have been on the ground more than one time. This is not a pork barrel bill. This is not boondoggling. These are some of the soundest projects that have ever been proposed for our State. Assuming that the bill is as sound all the way through, we have before us one of the soundest measures for the construction of public works that has ever come before the Senate.

I wish to give one or two examples. I refer particularly to the hurricane protection at Port Arthur and the hurricane protection at Freeport, Tex. At Port Arthur they have been trying for 10 years to get hurricane protection. The Army engineers estimated that if the hurricane that hit Cameron Parish had sent its force toward Sabine Lake Pass and Port Arthur, instead of Cameron Parish, the loss of life would have been 8,000 or 10,000, instead of a few hundred. Hurricane Carla demon-

strated the great need in Port Arthur for hurricane protection.

I thank the distinguished Senator from Oklahoma on behalf of the people of my State for bringing to the Senate a bill which will provide hurricane protection for Port Arthur. I am hopeful that the Senator will be able to accept my amendment.

Mr. KERR. The amendment offered by the Senator from Texas has been approved by the Bureau of the Budget and the Corps of Army Engineers. I recommend its adoption.

The PRESIDING OFFICER. The question is on agreeing to the amendment offered by the Senator from Texas.

The amendment was agreed to.

Mr. YARBOROUGH. I thank the distinguished Senator from Oklahoma. I send to the desk a brief explanation of the amendment, and a letter which I have received from the Deputy Director of the Bureau of the Budget, dated October 3, 1962. I ask unanimous consent that both be printed in the RECORD at this point.

There being no objection, the statement and letter were ordered to be printed in the RECORD, as follows:

My amendment authorizes the construction of the Big Pine and Sanders Creek projects in Lamar and Red River Counties, Tex. The proposed construction would consist of a dam on each of these creeks, with resulting flood control and water supply benefits. Local interests will contribute nearly half of the total construction costs, some \$7,501,000 against Federal costs of \$8,599,000.

These dams are urgently needed, both to prevent average annual flood damages of over \$140,000, and to assure a continuing water supply.

I am advised that the project is needed now to assure a water supply for a program of industrial development which is to provide some 3,000 jobs in this rural area. The local interests will bear the allocable water supply costs in accordance with the Water Supply Act of 1958.

All agencies have favorably reported on the bill with the exception of the Bureau of the Budget which has not completed its studies. However, I am advised that the Bureau of the Budget does not object to this amendment as offered, as the authorization is made conditional upon approval of the President.

SANDERS, BIG PINE, AND COLLIER CREEKS, TEX.

Location: Sanders, Big Pine, and Collier Creeks are right (south) bank tributaries of the Red River in northeast corner of Texas.

Authority: Resolution, House Committee on Public Works, adopted May 21, 1957.

Existing projects: No Federal improvements for flood control and allied purposes in any of the three watersheds.

Problems: Major floods originating in the watersheds cause average annual damages estimated at \$65,800 and \$73,800 respectively on Sanders Creek and Big Pine Creek. Periods of prolonged drought accentuate the need for storage for municipal and industrial purposes.

Recommended plan of improvement: Reservoirs on Sanders Creek and Big Pine Creek, with total storage capacities of 200,800 and 138,600 acre-feet, respectively, for purposes of flood control, water supply, fish and wildlife, and recreation.



## Estimated cost (1960 prices)

	Pat Mayse Reservoir (Sanders Creek)	Big Pine Reservoir	Total
Federal.....	\$4,180,000	\$4,419,000	\$8,599,000
Non-Federal.....	1 3,370,000	1 4,131,000	17,501,000
Total.....	7,550,000	8,550,000	16,100,000

<sup>1</sup> Amounts to be reimbursed by local interests for construction costs allocated to water supply, based on current prices and estimates of cost.

## Project economics

## PAT MAYSE RESERVOIR

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$122,400	\$98,900	\$221,300
Maintenance, operation, and replacement.....	57,200	22,500	79,700
Total.....	179,600	1 121,400	301,000
Annual benefits:			
Flood control.....			91,100
Water supply.....			189,400
Recreation.....			92,500
Fish and wildlife.....			117,400
Total.....			490,400

## BIG PINE RESERVOIR

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$129,100	\$120,900	\$250,000
Maintenance, operation, and replacement.....	48,400	20,600	69,000
Total.....	177,500	1 141,500	319,000
Annual benefits:			
Flood control.....			109,000
Water supply.....			220,000
Recreation.....			75,000
Fish and wildlife.....			102,200
Total.....			506,200

<sup>1</sup> Estimated on basis of costs currently allocated to water supply.

## Benefit-cost ratio:

Pat Mayse Reservoir..... 1.6  
Big Pine Reservoir..... 1.6

Local cooperation: Bear all costs all allocated water supply in accordance with the Water Supply Act of 1958, as amended, such costs currently estimated at \$7,501,000 for construction and \$43,100 annually for maintenance, operation, and replacements; hold and save the United States free from water rights claims. Local interests agree.

Comments of States and Federal agencies: State of Texas: Favorable.

Department of the Interior: Recommend acquisition of additional lands for fish and wildlife purposes.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

Federal Power Commission: Favorable.

## EXECUTIVE OFFICE OF THE PRESIDENT,

## BUREAU OF THE BUDGET,

Washington, D.C., October 3, 1962.

HON. WRIGHT PATMAN,  
House of Representatives,  
Washington, D.C.

DEAR MR. PATMAN: This will confirm our conversation this afternoon regarding the Sanders, Big Pine, and Collier Creeks, Tex., project. As I advised you, we have not been able to complete our work on this project because of certain problems which we have encountered. However, we hope to be able to resolve these shortly.

In view of the urgency which you stated was involved in the prompt authorization of this project in the 1962 Flood Control Act,

the Bureau of the Budget would not interpose any objection to its inclusion in the bill now pending before the Congress provided the following language is included in any amendment to this bill relating to the project:

"The project for Sanders, Big Pine, and Collier Creeks, Tex., is hereby authorized substantially as recommended by the Chief of Engineers, at an estimated cost of \$16,100,000, subject to the recommendations of the Secretary of the Army and approval of the President."

Sincerely yours,

THOS. B. STAATS,  
Deputy Director.

Mr. JORDAN of North Carolina. Mr. President, I send an amendment to the desk and ask that it be stated.

The PRESIDING OFFICER. The amendment will be stated.

The CHIEF CLERK. At the end of the bill it is proposed to add the following new section:

SEC. 213. The Wilkesboro Reservoir flood control project, Yadkin River, North Carolina, authorized by the Flood Control Act of 1946, shall hereafter be known and designated as the W. Kerr Scott Dam and Reservoir, in honor of the late Senator W. Kerr Scott of North Carolina. Any law, regulation, document, or record of the United States in which such project is designated or referred to shall be held and considered to refer to such project by the name of the W. Kerr Scott Dam and Reservoir.

The PRESIDING OFFICER. The question is on agreeing to the amendment offered by the Senator from North Carolina.

Mr. JORDAN of North Carolina. Mr. President, it would be most fitting for the Congress to name the flood control project on the Yadkin River at Wilkesboro in honor of the late Senator W. Kerr Scott.

I have, therefore, on behalf of Senator ERVIN and myself, submitted an amendment to the omnibus flood control and rivers and harbors bill which would designate the Wilkesboro project as the "W. Kerr Scott Dam and Reservoir."

For some time I have sincerely felt that this outstanding project should be named in honor of Senator Scott because of the tremendous amount of work he did in making the project a reality. Although a great many people have been instrumental in bringing the project to completion, it was Senator Scott who spearheaded the efforts to obtain construction funds for it soon after he came to the Senate in 1954.

As Governor of North Carolina, and later as a Member of the Senate, Kerr Scott was widely known for the deep interest he had in the development of our water resources. He often said that the progress we would make in the future would be measured by the progress we made in developing our water resources. The valuable work he did on the Wilkesboro project, and other water projects in North Carolina, brought a new awareness among our people of the vital role water conservation plays in our economy.

The Wilkesboro project was dedicated only a few weeks ago and I attended the dedication ceremonies. In spite of some controversy that delayed action on

the project for many years, all of the people in Wilkes County and in northwestern North Carolina today are indeed proud of the fine reservoir that is now being filled and of the great prospects this project holds for the development of a large area of our State.

During his career as commissioner of agriculture, as Governor, and as Senator, Kerr Scott was always known as a builder and one who firmly believed that North Carolina and the South could reach their full economic potential only by going forward with the task of developing our natural resources.

I think it is only right and proper that we now take note of the outstanding work he did toward this end by naming the Wilkesboro project in his honor.

Mr. ERVIN. Mr. President, I wish to concur in everything which my able and distinguished colleague [Mr. JORDAN] has said and to join him in urging the adoption of the amendment naming the Wilkesboro dam and reservoir the W. Kerr Scott Dam and Reservoir.

As commissioner of agriculture, as Governor of North Carolina, and as a Member of the Senate, W. Kerr Scott exerted tireless energy in bringing to the people who dwell upon the farms of North Carolina a more abundant life. One of his great interests in this area, as well as in the economic area generally, was in the conservation of water resources and the prevention of floods. For those reasons it is most fitting that the great dam and reservoir on the Yadkin River at Wilkesboro should be named in honor of and in memory of the great services which W. Kerr Scott rendered to the people of our State and Nation, particularly to those who dwell upon farms.

Mr. KERR. Mr. President, the Senator from Oklahoma urges the adoption of the pending amendment. I have no finer memories than those associated with my service in the Senate with W. Kerr Scott, the late Senator from North Carolina, who for many years had a seat very close to mine in this Chamber. He was one of the greatest souls and most outstanding statesmen I have ever had the pleasure of associating with. I can understand why the Senators from North Carolina should urge the adoption of an amendment to change the name of one of their great dams and reservoir the W. Kerr Scott Dam and Reservoir in honor of the great service and memory of that fine man. I certainly am happy to join in asking for the adoption of the amendment.

The PRESIDING OFFICER (Mr. HART in the chair). The question is on agreeing to the amendment offered by the Senator from North Carolina [Mr. JORDAN].

The amendment was agreed to.

Mr. METCALF. Mr. President, I congratulate the committee on including in this authorization bill a substantial program for the Columbia Basin. At the present time, the only authorized dam in the basin on which construction has not started is Libby Dam in northwestern Montana.

This project, designated by former Secretary of Interior Douglas McKay, as



"one of the most valuable projects on the Columbia River system, urgently needed," has been stalled by negotiations with Canada. In the closing days of the Eisenhower administration, a Columbia River Treaty was negotiated and promptly ratified by the United States. Under the provisions of the treaty, the United States would build Libby, and Canada would construct three high dams on the Columbia in Canada. Ratification in Canada ran into opposition and has not taken place yet. The provision of the treaty for export and sale of Columbia River power to the United States was the principal obstacle. However, on September 27, Governor General Vanier, in his speech from the throne of the opening of the first session of the 25th Canadian Parliament said:

It is hoped that arrangements will soon be completed that will make it possible to submit for your approval the Columbia River Treaty and the legislation required in Parliament to implement it. My Ministers have come to the conclusion that large-scale, longterm contracts for the export of power surplus to Canada's needs, present and potential, should now be encouraged in order to expedite the development of major power projects in Canada which are too large to be supported by the domestic market. Such exports can also strengthen our balance of payments.

This means that Libby Dam may be cleared for construction next year. In preparation for such clearance the current public works appropriation bill contains planning and development money.

With the beginning of construction of Libby there will be nothing in the pipeline for future water resource development in the entire Pacific Northwest. Passage and approval of the Columbia River section in S. 3773 will provide for planned and continuous development for the decade ahead. Some of the projects herein authorized may not be ready for actual construction for several years but their authorization at this time will permit orderly planning and assurance of continuous increase in power and multiple-purpose development of water resources so projects will be ready for construction when the present dams are completed or nearing completion.

Knowles Dam in western Montana is an example. For a generation the Montana Power Co. has talked about building run-of-the-river dams at one or another site in the reach of the river that will be inundated by Knowles. Authorization will determine that this flood control, power and recreation multiple-purpose project is to be constructed by the Federal Government and that, with existing storage and Bruces Eddy, also authorized in this bill, and with Canadian storage will amount to a storage capacity on the Columbia of 24,600,000 acre feet. Their construction would approach the flood control goal set for the Columbia and its tributaries.

The total estimated cost of the four projects for the Columbia Basin—Knowles, Asotin, Bruces Eddy, and China Gardens—plus the four projects in the Willamette Basin will be more than \$670 million. The amount authorized to be

appropriated for these projects is the sum of \$226 million. Inasmuch as Knowles is to be built by the Bureau of Reclamation, Department of the Interior, \$50 million is specifically set aside for its use for Knowles.

It is suitable and proper that the authorization proceed in this manner. In the case of Knowles, complete authorization, at this time, will give the Secretary of the Interior authority to begin negotiating with the Flathead-Kootenai Tribe for compensation for their power sites and for payment of tribal land to be inundated. One method of compensation suggested at the hearing was the reservation of a block of power for a perpetual income for the tribe, allowing the tribe to take advantage of its tribal assets by using such a block of power to attract industry to or near the reservation and providing additional economic opportunities for members of the tribe and nearby communities. It may be that a combination of outright payment and power reservation, or some other provision, will be the ultimate result of such negotiations. But until there is authorization these negotiations cannot begin.

The subject of reservation of a block of power for the Flathead-Kootenai tribe brings up the other important negotiation that will come about as a result of authorization in this bill. That is a power reservation for Montana.

If all or part of the tribal compensation consists of setting aside a block of power, then such block may be all or part of the at-site power reservation for the State of Montana that Senator MANSFIELD, Representative OLSEN and I have specified must be a part of the agreement for final construction. However, other alternatives open up with this authorization. The senior Senator from Montana [Mr. MANSFIELD] has introduced a bill, with which I agree in principle, that provides for a power reservation for Montana at all Federal projects. The enactment of this measure would solve the question of a power reservation without further legislation on that subject. Such a power reservation is justified for upstream States for a variety of reasons that have been frequently cited on the floor of the Senate but especially for the reasons given by the Senator from Idaho [Mr. CHURCH] in his testimony on Bruces Eddy Dam as follows:

The Bruces Eddy Dam, like Hungry Horse Dam in western Montana and other dams, will help to regulate the flow of the river in such a way as to augment the power potential of the generating facilities in the run-of-the-river dams downstream. This priority would not apply to any other than onsite power. As the chairman knows, in western Montana, there is such a priority at the Hungry Horse Dam, which reserves for the priority use of Montana the onsite power developed at that site. We would like to see the Bruces Eddy Dam treated the same way for the benefit of Idaho. We recognize that the economies of both the States of Washington and Oregon are more advanced than our own in terms of industrialization.

And there is a very real possibility that once a dam of this size is built inside Idaho, the power will be drained off to meet the needs of the more industrialized economies

in Oregon and Washington, and we won't have the benefit of that power when industrial growth occurs in our own State.

So we feel for this reason that this is a moderate and a reasonable request, that it is well suited and adapted to the needs of the economy of our State, that it is consistent with treatment already given at the Hungry Horse in western Montana, and that therefore it ought to be favorably acted upon by this committee.

In discussing these matters with the Senator from Idaho it is agreed that we will prepare general language for such power reservations as would be applicable to the entire Columbia Basin. The upstream States, where the storage is located, will work with the downstream States, which get downstream benefits, to get equitable benefits for the upstream contribution. Such legislation, generally applicable, would take care of the power reservation desired by the Senator from Idaho and that sought by the Montana Senators.

Mr. CHURCH. Mr. President, will the Senator from Montana yield?

Mr. METCALF. I am glad to yield to the Senator from Idaho.

Mr. CHURCH. Mr. President, the bill introduced by the distinguished majority leader [Mr. MANSFIELD] represents one of the ways by which to solve the problem to which the junior Senator from Montana has referred. I am hopeful that real progress may be made in that direction in the next session of Congress.

As the Senator from Montana knows, high storage dams situated upstream confer very large benefits upon the run-of-the-river dams located downstream in the States of Oregon and Washington. By regularizing the flow of water downstream, they augment the power potential of the run-of-the-river dams and thus confer real, direct, and substantial benefits upstream.

I think it is entirely reasonable for States situated as are Idaho and Montana to ask for special consideration when it comes to the right to claim the onsite power developed by high storage dams in the high mountain areas. If we do not have a certain priority right to that power, then we will always face the possibility that the more industrialized economies downstream may drain off the power from the dams situation in our States and thus, in effect, deny us the full benefit of the projects.

I think we are seeking something which is most reasonable and fair, considering the contribution which the high dams in the upper reaches make to the downriver low head dams by increasing their power potential.

I pledge my full support to the Senators from Montana in a common effort to find a legislative solution which will be equitable for all concerned.

Mr. METCALF. Mr. President, I thank the Senator from Idaho for a succinct summary of some of the reasons for a power reservation. We have been working together on proposed legislation to be introduced next year which will provide a basin solution for the problem. Most of the land to be inundated is in the upstream area, and much benefit will



be conferred in the downstream area. I feel certain that the Senators from Washington and Oregon, States which will benefit from the upstream storage, will cooperate with us to have general legislation passed. I hope it will be passed before it is necessary to seek an additional authorization for specific amounts as provided by the bill.

Mr. CHURCH. I thank the Senator from Montana.

Mr. METCALF. Mr. President, failing the other approaches, it will be necessary to seek an additional amount for construction, and we can be prepared to submit a request similar to the Hungry Horse formula, with special application to Knowles. The other approaches are more desirable, and there will be time to attempt them. At the same time, there will be a necessity to authorize further funds and an opportunity to make a special reservation if such is needed.

Regarding another portion of the Columbia River system, the committee took no action at this time on High Mountain Sheep or Nez Perce. The Secretary of the Army, with the concurrence of the Secretary of the Interior, recommended a Federal project for the Middle Snake River in the area of the Salmon River, but with the further recommendation that selection and authorization of the project, either Mountain Sheep or alternative, be deferred pending further study of the fishery problem. Competing applications for the licensing of a non-Federal project at the alternate Mountain Sheep or Nez Perce sites are now before the Federal Power Commission. Subsequent to transmittal of the report of the Secretary of the Army to the Congress on April 25, 1962, the Secretary of the Interior advised the Federal Power Commission that the fishery studies in progress show little promise of an early solution to the fishery problem at the Nez Perce site, and he, therefore, proposed that the Mountain Sheep site be recommended for Federal development. The Federal Power Commission has not concluded its consideration of the license applications before it and accordingly the committee was not informed whether the Commission proposes to make a recommendation to the Congress under section 7(b) of the Federal Power Act. In these circumstances it is reasonable to conclude that consideration of a possible Federal project should be deferred for the time being without prejudice.

Water resource development, so necessary for the future of the Columbia Basin, will grind to a halt if this bill is not passed with the Columbia Basin provisions intact. Only 4 of the 11 projects originally recommended by the Corps of Engineers remain in the bill. Other projects, such as the dam at Nine Mile Prairie, the Flathead outlet improvement, the Penny Cliff Dam, interfered with essential fish and wildlife and recreation and have been stricken from the bill. The approval of storage at Knowles will take off the pressure for storage at Nine Mile Prairie and Penny Cliffs and leave those stretches of the river open for recreational development. Storage at Knowles will eliminate the need for al-

ternate storage at Glacier View and Smoky Range which would include Glacier. Power at Knowles will also eliminate the need for a power project at Spruce Park, which would destroy valuable fish and recreation areas. I hope we may keep this section of the bill intact.

Mr. JOHNSTON. Mr. President, I offer an amendment for myself and on behalf of my colleague [Mr. THURMOND]. He is not in the Chamber at the moment, but I am satisfied that his name should be added as a cosponsor, because we offered a similar amendment together once before.

The amendment would grant to the Duke Power Co. the right to build a private dam on the Savannah River. I understand the proposal has been cleared by the Bureau of the Budget and also by the Corps of Engineers.

The dam would not be built by the Government, but by a private concern. I am glad to offer the amendment because while I have been a supporter of public power for a long time, the amendment would assure private power companies that I am not against them. I wish that they also would build more dams.

The amendment merely provides authorization.

The PRESIDING OFFICER. The amendment will be stated.

The Chief Clerk read as follows:

At the appropriate place it is proposed to insert: That the consent of Congress is hereby granted to Duke Power Company, its successors and assigns, to construct, maintain, and operate a dam across Savannah River between Anderson County, South Carolina, and Elbert County, Georgia, near Middleton Shoals, and about two hundred ninety-seven miles above the mouth of said river, for the purpose of providing a pool for condenser water for a steam-electric plant: *Provided*, That work shall not be commenced until the plans therefor have been submitted to and approved by the Chief of Engineers, United States Army, and by the Secretary of the Army, and when such plans have been approved by the Chief of Engineers and by the Secretary of the Army, it shall not be lawful to deviate from such plans either before or after completion of said dam unless the modification of such plans has previously been submitted to and approved by the Chief of Engineers and the Secretary of the Army: *Provided further*, That in approving the plans for said dam such conditions and stipulations may be imposed as the Chief of Engineers and Secretary of the Army may deem necessary to protect the present and future interest of the United States: *Provided further*, That this Act shall not be construed to authorize the use of such dam to develop water-power or generate hydroelectric energy: *And provided further*, That the grantee, or its successors, shall hold and save the United States free from all claims arising from damage which may be sustained by the dam herein authorized, or damage sustained by the appurtenances of the said dam, by reason of the future construction and operation by the United States of Hartwell Reservoir or any other Federal project upstream or downstream from the dam herein authorized.

Sec. 2. The authority granted by this Act shall cease and be deemed null and void unless the actual construction of the dam hereby authorized is commenced within four years and completed within seven years from the date of approval of this Act.

Sec. 3. The right to alter, amend, or repeal this Act is hereby expressly reserved.

Mr. JOHNSTON. Mr. President, I should like to point out that the Government will be saved more than \$100 million by having this dam built by the private concern which also intends to build 12 or more miles of railroad leading up to the steamplant, which will use thousands of tons of coal.

Mr. RANDOLPH. Mr. President, will the Senator from South Carolina yield?

The PRESIDING OFFICER (Mr. HART in the chair). Does the Senator from South Carolina yield to the Senator from West Virginia?

Mr. JOHNSTON. I yield.

Mr. RANDOLPH. Of course the word "coal" is very dear to West Virginia. Today we need to expand our coal markets.

I have knowledge of this project and I support it. If it is completed, this company will use approximately 3½ million tons of bituminous coal, on an annual basis. This will mean very much to West Virginia, Kentucky, and other coal-producing areas.

Mr. JOHNSTON. Mr. President, I am delighted to have that statement made by the Senator from West Virginia.

All along I have favored the construction of two dams, one at Carter Shoals, and also this dam. The dam at Carter Shoals is to be built by the Government. I think the Senator from Georgia has an amendment which he will submit in that connection.

But these two dams are quite different. One dam will be built privately; the other is to be built by the Government.

Therefore, Mr. President, I hope the Senator from Oklahoma [Mr. KERR] will agree to this amendment.

Mr. RUSSELL. Mr. President—

The PRESIDING OFFICER. Does the Senator from Oklahoma yield to the Senator from Georgia?

Mr. KERR. I yield.

Mr. RUSSELL. Mr. President, I do not like to wash family linen in public. However, I say very frankly that this issue has been a controversial one between certain elements in the State of South Carolina and all the people who live on the Georgia side of the Savannah River.

Many years ago a bill was enacted providing for the comprehensive development of the Savannah River Basin by the Board of Engineers. Two very large dams—in fact, two of the largest contemplated by that report, one at Clark's Hill and the other at Hartwell—have already been constructed.

There was proposed for construction on the Savannah River, in Georgia and South Carolina, at what is known as Trotters Shoals, a reservoir for flood control and allied purposes. This dam was strongly recommended by the Board of Engineers for Rivers and Harbors, under date of March 22, 1962, at an estimated cost of \$78,700,000.

I point out that the estimated benefit-cost ratio for this project was 1.59. This is a public-power project which would be available to the rural electric cooperatives and to the municipalities on both sides of the river.



I can understand the interest of the Senator from South Carolina in the Duke power project. That project will be located on the South Carolina side of the river, although it will flood lands in both Georgia and South Carolina. The State of South Carolina will get an estimated \$3 million to \$4 million in taxes, annually, from this powerplant. Georgia will get only a great deal of flooded land. However, Mr. President, I do not desire to take a dog-in-the-manger attitude in regard to the project covered by the amendment the Senator from South Carolina has offered. The project is highly advantageous to South Carolina, although it does not benefit my State.

But I cannot agree to have this amendment added to the bill unless there is also added to the bill an amendment for the development of the project at Trotters Shoals, on the Savannah River, as recommended in the report of the Board of Engineers in March 1962.

Unfortunately, the Secretary of the Army will not submit to the Budget projects of this nature, unless they have been approved by the Governors of all States affected. This project has been approved by the Department of Agriculture, by the Department of the Interior, by the Department of the Army, and by every other Federal agency which has considered it. When it got to the office of the Governor of South Carolina, he refused to approve it. For that reason—and that reason alone—we do not have before us a Budget estimate for this project.

The benefit-cost ratio of the project is highly favorable; it is much above that of many projects we are approving.

Therefore, Mr. President, I announce now that I shall offer an amendment to this bill, on page 28, to be included in the construction projects, under the subheading "Savannah River Development." The amendment is as follows:

The Trotters Shoals Reservoir on the Savannah River is hereby authorized in accordance with the report of the Board of Engineers for Rivers and Harbors dated March 22, 1962, at an estimated cost of \$78,700,000.

I shall offer that amendment on my own behalf and on behalf of my distinguished colleague, the junior Senator from Georgia [Mr. TALMADGE]; and I ask unanimous consent to have printed at this point in the RECORD the report from the U.S. Army Board of Engineers.

There being no objection, the report was ordered to be printed in the RECORD, as follows:

CORPS OF ENGINEERS, U.S. ARMY,  
BOARD OF ENGINEERS FOR RIVERS  
AND HARBORS,

Washington, D.C., March 22, 1962.

To: Chief of Engineers, Department of the Army.

Subject: Savannah River, Georgia and South Carolina, Trotters Shoals Reservoir.

1. Authority.—This report is in response to the following resolution adopted September 12, 1961:

Resolved by the Committee on Public Works of the U.S. Senate, That the Board of Engineers for Rivers and Harbors, created under section 3 of the River and Harbor Act, approved June 13, 1902, be, and is hereby, requested to review the reports of the

Chief of Engineers on the Savannah River, Georgia and South Carolina, published as House Document No. 657, 78th Congress, 2d session, and Senate Document No. 6, 87th Congress, 1st session, with a view to determining whether the recommendations contained therein should be modified at the present time, with particular reference to the advisability of constructing a reservoir at the Trotters Shoals site for flood control and allied purposes.

2. Physical description.—The Savannah River drains 10,580 square miles, with 55 percent in Georgia, 43 percent in South Carolina, and 2 percent in North Carolina. The stream rises on the southern slope of the Blue Ridge Mountains in North Carolina and flows southeasterly about 400 miles in a meandering course through the Piedmont Plateau and the coastal plain to the Atlantic Ocean. The fall from headwaters to mouth is more than 2,000 feet. The topography of the watershed is hilly to mountainous. The river with certain of its tributaries forms the boundary between Georgia and South Carolina.

3. Existing improvement.—A general plan for development of the water resources of the Savannah River Basin was approved by the Flood Control Act of 1944. This plan consists of 11 reservoir projects for power, flood control, navigation, and other purposes. These projects, in the order recommended for construction to meet demands for hydroelectric power, are Clark Hill, Hartwell, Goat Island, and Middleton Shoals, all on Savannah River; and Camp Creek, War Woman, Rogues Ford, Sand Bottom, Tallow Hill, Anthony Shoals, and Newry-Old Pickens, all on tributaries of the Savannah River. The act also authorized the construction of the first unit—Clark Hill Reservoir—now completed and in full operation. The project generates hydroelectric power, controls floods, provides incidental regulation of streamflow for navigation below Augusta and furnishes a raw water supply for McCormick, S.C. Hartwell Reservoir was authorized by the Flood Control Act of 1950 and is now nearing completion. The project is planned for generation of hydroelectric power with incidental augmentation of regulated flow for navigation below Augusta, the control of floods, and the future needs of industrial and domestic water users. The remaining projects of the approved plan have not been authorized. Pertinent data for Clark Hill and Hartwell Reservoirs follow:

Item	Clark Hill Reservoir	Hartwell Reservoir
Location, miles above mouth of Savannah River	238	305
Drainage area above dam, square miles	6,144	2,088
Reservoir storage, acre-feet:		
Gross	2,900,000	2,858,100
Usable:		
Flood control	390,000	295,500
Hydropower and low-flow regulation for navigation	1,340,000	1,427,000
Installed capacity:		
Units, number	7	15
Total kilowatts	280,000	330,000
Estimated cost:		
First cost (August 1961)	\$79,509,000	\$86,215,000
Operation and maintenance	\$531,600	-----

<sup>1</sup> Initially 4.

4. The Federal navigation project for Savannah River extends from the head of navigation at Augusta, Ga., 20 miles below Clark Hill Dam, to the upper end of Savannah Harbor, about 199 miles. The controlling depth is 6 feet throughout the year. The authorized project provides for a channel 9 feet deep and 90 feet wide for a discharge of 5,300 cubic feet per second at Augusta with Clark Hill powerplant operating. The work consists of one lock and dam at New Savannah Bluff, a few miles below Augusta;

and dredging, open-river regulation, bank stabilization, cutoff closures, and channel clearing. The lock and dam was completed in 1937. The work remaining to be done is the deepening and widening of the channel for its entire length. This work, now underway, is scheduled for completion in June 1962 at an estimated cost of \$3,660,000. The Federal project for Savannah Harbor provides 31 miles of turning basins and channel from the ocean to terminal facilities at and near Savannah, all for deep-draft vessels. The only other authorized project in the Savannah River Basin is the Augusta levee completed in 1941. This levee, built by the city to protect Augusta from floods, was raised and improved by the United States.

5. General economy.—The population of the basin above Augusta was 780,000 in 1960. Populations of the largest cities were: 70,600, Augusta, Ga.; 41,300, Anderson, S.C., and 16,600, Greenwood, S.C. The principal industries have been expanding in recent years. These are textiles, paper pulp, and the mining of granite and kaolin. The basin has extensive stands of both softwood and hardwood. The economy of the area now being considered is expanding rapidly.

6. Hydrology.—Correlation of streamflow records in the basin provides a continuous record of average monthly flows since 1925. The actual average annual runoff for the period 1927 to 1960 at Calhoun Falls just above the Clark Hill pool and below Hartwell is estimated at 5,200 cubic feet per second or 1.80 cubic feet per second per square mile. The flow of the river at the head of the reach under study will depend completely on the operation of the Hartwell project. The average annual flow from the Hartwell Reservoir is expected to be 4,300 cubic feet per second; and average flow for the critical low-flow period for power generation is estimated at 3,560 cubic feet per second. Instantaneous flow is expected to range from zero to a maximum of 25,600 cubic feet per second with the initial four units in operation. Hartwell Reservoir, now nearing completion, will completely control all floods except those of rare occurrence.

7. Problems.—The objective of the investigation is to determine the advisability of modifying the recommendations of the prior report (H. Doc. 657, 78th Cong., 2d sess.), forming the basis for authorization of the general plan of development in 1944, and the recommendations of the more recent report, published as Senate Document 6, 87th Congress, first session, upon which Congress has taken no action, all with particular reference to the advisability of constructing a reservoir at the Trotters Shoals site for flood control and allied purposes.

8. The accomplishment of this objective requires a determination of the next logical step in the approved general plan for development of the water resources of the Savannah River Basin. It was established early that this would be primarily for hydroelectric power generation on the main stem of the Savannah River and would be in the 30-mile reach between the upper limits of the Clark Hill Pool and the Hartwell Dam site. The early report forming the basis for authorization of the general plan, proposed in this reach, the Middleton Shoals site (mile 295.7, maximum power pool elevation 475) and the Goat Island site (mile 277.6, maximum power pool elevation 430). The recent report published as Senate Document 6 proposed the Carters Island site (mile 283.2, maximum power pool elevation 480) and the Goat Island site (mile 277.6, maximum power pool elevation 375). This change from the previous plan was made because the selected location of Hartwell Dam and the potential for pump-storage facilities there permitted a higher pool downstream than previously planned; because costly highway and railroad relocations would be avoided near Calhoun Falls, S.C.;



and in order to keep from flooding a future site for construction of a pulp or paper mill at the mouth of Rocky River near Calhoun Falls which required holding the maximum power pool at or below elevation 375 in that area. Since that time there has been no known definite commitment toward construction of a mill at this location. And there are no firm data presently available showing that installation of a pump-turbine unit at the Hartwell powerplant would be economically advisable in the near future. Further, the Duke Power Co. proposes to construct a dam across the Savannah River at mile 296.6, to provide reregulation of Hartwell flows for steam station use and to provide a thermal barrier between intake and discharge points of the cooling system. The power company has stated that construction of a dam in this reach of the river with either 475 or 480 elevations of the power pool would be compatible with the construction of their proposed steam station. Preliminary information indicates that an increase from 475 to 480 in the pool elevation of a proposed hydropower dam would increase the cost of the power company's dam about \$1,200,000. Although the possibility of constructing a single high dam to develop the entire head potential of the reach was considered in prior reports—both at the Trotters Shoals and Goat Island sites—no thorough investigation of a high-head dam at either site was made.

9. There is a growing demand for power in this area. The available head in the 30-mile reach under study is about 150 feet. The drainage area tributary to the reach is about 800 square miles. As to the need for municipal and industrial water supply, there is at the present time no known specific demand for storage from any reservoir that may be proposed for the reach.

10. Improvements desired.—The State of Georgia, through its General Assembly, urged overall development of the Savannah River in general accordance with the plan approved by Congress. The electric cooperatives of Georgia, South Carolina, and North Carolina believe that orderly and full development of the Savannah River for generation of hydro-electric power is necessary. These interests favored construction of the Carters Island-Goat Island combination proposed in the recent report (published as S. Doc. No. 6, 87th Cong., 1st sess.). On the other hand, representatives of the State of South Carolina and South Carolina counties bordering the affected reach opposed the proposed improvement mainly because it was believed that industrial development would be prevented or hindered by restrictions on the use of water and by the usurpation of industrial sites, thus adversely affecting the economy of the area. The Chief of Engineers in his report noted that the proposed Carters Island and Goat Island Reservoirs were located in the States of Georgia and South Carolina; and that the Governor of the latter State, in his capacity as head of the State and supported by the concurrent resolution of the General Assembly of South Carolina, had expressed strenuous opposition to the proposal. Consequently, no recommendation for authorization of the projects was made; and no action thus far has been taken by the Congress.

11. Improvements proposed.—The district engineer now finds the most suitable development to be a single dam at Trotters Shoals, river mile 276.2, about 1 mile up-

stream from the old Trotters Shoals site. Storage for hydroelectric power generation would be provided between elevations 472 and 475. Between elevations 475 and 480 (top of gates) storage would be provided for minor flood regulation and to offset loss of valley storage. The district engineer finds that future pump-storage facilities could better be provided at this site than at the Hartwell Dam as conceived in the prior plan for the Carters Island-Goat Island combination. He finds, however, that only a limited amount of offpeak steam-electric energy is now available for pumping, and that conventional hydrogeneration can probably meet peaking power demands for the next 10 years. Accordingly, pump-storage facilities are not included in present plans. As to selection of the maximum power pool elevation at 475 for the new Trotters Shoals site, comparison with a project at the same site having a power pool at elevation 480 shows that the additional costs would slightly exceed the additional benefits, leading to selection of pool elevation 475. This analysis excluded consideration of the additional cost of the proposed dam for the steamplant. The unfavorable relationship of the added costs and added benefits was due to greatly increased costs for relocations and lands. A substantial portion of the area which would be required for a potential pulp or paper mill (par. 8 above) would be flooded at either pool level. The district engineer finds further that the present proposal is economically more advantageous than the previously proposed Carters Island-Goat Island combination because it would develop more power. An economic comparison of the two proposals on a comparable basis follows:

Item	Carters Island and Goat Island combination	Proposed Trotters Shoals
First costs (July 1961).....	\$79,500,000	\$78,700,000
Annual charges.....	\$4,864,000	\$5,133,000
Annual benefits.....	\$6,574,000	\$7,919,000
Excess of benefits over costs.....	\$1,710,000	\$2,786,000
Benefit-to-cost ratios.....	1.35	1.54

Pertinent physical data for the proposed Trotters Shoals Dam and Reservoir follows:

Item	Trotters Shoals Dam and Reservoir
Dam location, miles above mouth of Savannah River.....	276.2
Drainage area, square miles.....	2,890
Type of dam.....	(1)
Spillway.....	(2)
Reservoir storage, acre-feet:	
Gross at maximum design pool, elevation 489.....	1,200,000
Gross at top of flood-control pool (top of gates), elevation 480.....	955,000
Usable:	
Power pondage, elevations 472 to 475.....	57,000
Minor flood regulation, elevations 475 to 480.....	110,000
Installed (firm) capacity, kilowatts.....	310,000
Average annual energy, kilowatt-hours.....	471,400,000

<sup>1</sup> Concrete gravity with rolled-earth embankments at each abutment.

<sup>2</sup> Concrete gravity with 16 tainter gates, 40 feet wide by 35 feet high.

12. Costs and feasibility.—The estimated first cost, annual charges, and economic feasibility are:

Item	Trotters Shoals Reservoir
First costs (July 1961):	
Total construction including public use and access (all Federal).....	\$78,670,000
Preauthorization studies.....	30,000
Total.....	78,700,000
Annual economic charges:	
Interest and amortization.....	2,410,000
Operation, maintenance, and major replacements.....	483,000
Taxes foregone.....	2,108,000
Other losses.....	132,000
Total annual charges.....	5,133,000
Average annual economic benefits:	
Power.....	7,525,000
General recreation.....	280,000
Fish and wildlife recreation.....	114,000
Total.....	7,919,000
Ratio of benefits to costs.....	1.54

The interest and amortization parts of the annual charges were evaluated by using an interest rate of 2½ percent and the indicated ratio of benefits to costs is based on a 100-year period of analysis. The total annual charges were allocated by the alternative justifiable expenditure method to power, general recreation, and fish and wildlife recreation to determine the allocated cost to power, the only reimbursable function. The annual costs allocated to power, less the economic losses including taxes foregone, yield \$2,565,000 as the present estimate of the reimbursable annual cost for the power function. The expected net power revenues presently estimated by the Southeastern Power Administration are \$5 million denoting financial feasibility of the power feature.

13. Recommendations of reporting officers.—The district engineer believes that the proposed Trotters Shoals Reservoir for hydroelectric power, general recreation, and fish and wildlife recreation would stimulate industrial and economic progress in the area and would increase land values and employment by virtue of its anticipated use for recreation. He finds that the proposed reservoir with a maximum power pool at elevation 475 is economically sound, provides for the optimum use of water resources between Clark Hill Reservoir and Hartwell Dam, and is the next logical step in development of a comprehensive plan for the orderly management and use of the water resources of the Savannah River Basin. He recommends its construction by the United States and that authorization provide for future development of pump storage at the damsite when power supply and demand warrant. The division engineer concurs.

14. Public notice.—The Division Engineer issued a public notice stating the recommendations of the reporting officers and affording interested parties an opportunity to present additional information to the board. Many communications were received both for and against the improvement. Those favoring improvement are the State of Georgia, officials of cities mostly in Georgia, the electric cooperatives, and many civic organizations. Those opposing improvements are the State of South Carolina, some city officials, and some civic organizations of South Carolina. The principal reasons given for opposition are that construction of the pro-



posed Trotters Shoals Reservoir would destroy industrial sites; restrict the free use of water by industrial, municipal, and agricultural consumers; eliminate free-flowing water and thus restrict the water supply available for disposal of industrial wastes; prevent industrial development and the creation of new jobs by industry; and be an economic waste of funds. In addition, requests were received for further consideration of the advisability of modifying the recommended improvement to provide for pump storage both at the existing Hartwell powerhouse and at the proposed Trotters Shoals Dam. The board carefully considered the questions raised in the communications received.

#### VIEWS AND RECOMMENDATIONS OF THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS

15. Views.—The Board of Engineers for Rivers and Harbors concurs in general in the views and recommendations of the reporting officers. It notes that cost allocation by the separable costs-remaining benefits method would not materially change the results presented by the reporting officers. The Board believes, however, that future cost allocations should be made using the separable costs-remaining benefits method.

16. Recommendations.—The Board accordingly recommends the further improvement of Savannah River, Ga. and S.C., by construction of Trotters Shoals Reservoir on the Savannah River for hydroelectric power, general recreation, and fish and wildlife recreation; generally in accordance with the plan of the District Engineer and with such modifications thereof as in the discretion of the Chief of Engineers may be advisable, at an estimated cost of \$78,700,000 for construction and \$483,000 annually for operation, maintenance, and major replacements.

For the Board:

KEITH R. BARNEY,

Major General, U.S. Army, Chairman.

Mr. RUSSELL. Mr. President, if the Senate sees fit to approve the other project, I certainly hope the Senate will approve this one, which would have been before us with a budget estimate, but for the fact that it did not meet with the approval of the Governor of South Carolina.

I should like to have a statement made by the distinguished Senator in charge of the bill with respect to this amendment.

Mr. KERR. Mr. President, these two projects have been considered by the committee. They have been subject of careful study and analysis by the Corps of Engineers. They have been reviewed by the Bureau of the Budget. There is a relationship between them—one which, in my judgment, would make it wise either to have both of them accepted or to have neither of them accepted.

If the Senator from South Carolina will accept an amendment at page 2 of the amendment he has offered, in line 22, to consist of changing the period to a colon and then adding the words:

*Provided further, That this authorization shall be subject to the approval of the President of the United States.*

And if the Senator from Georgia will accept a similar amendment to the section authorizing his project—

Mr. RUSSELL. I have no objection to the proposed amendment.

Mr. KERR. And if the two of them are accepted together with those provisions, I would ask that the Senate approve the amendment.

Mr. TALMADGE. Mr. President—  
Mr. RUSSELL. I yield to my colleague, the junior Senator from Georgia.

Mr. TALMADGE. Mr. President, I desire to thank my distinguished senior colleague [Mr. RUSSELL] for taking the initiative in offering this amendment at this time. As he has correctly stated, there has been some controversy between the State of Georgia and the State of South Carolina about these proposals.

It is the feeling of the overwhelming majority of the people of Georgia who live in the area contiguous to the Savannah River that these two projects are compatible with each other and that they ought to be authorized simultaneously and developed simultaneously.

I desire to express my appreciation to the distinguished senior Senator from Oklahoma [Mr. KERR], who is acting chairman of the committee and in charge of the bill, for having accepted authorization of both projects at this time.

The PRESIDING OFFICER. Is there objection to accepting the amendment offered by the Senator from South Carolina [Mr. JOHNSTON] with the addition as proposed by the Senator from Oklahoma? The Chair hears none.

Mr. JOHNSTON. Mr. President, I have no objection. We all know that if the President does not want any of these projects, they will not be constructed. Personally, I am for both projects, as far as that goes, but I do not think we must have one to have the other. I will go that far. If one is authorized with the other, and if something comes up so that one project cannot get through, I do not see why the private generating plant should not be built, when it is not going to cost the Government anything, and when it will mean much to the people in the area in the form of taxes. It will also mean that coal from West Virginia will be sold to that area. A great deal of work will be created in constructing this facility and in helping employment, for which there is a need all over the United States. I think it is a fine thing. If one project cannot be approved without the other, I have no objection to approving the other.

Mr. KERR. Mr. President, the reason the Senator from Oklahoma has suggested that both projects be authorized if either is authorized is based upon the fact that these two projects would have been before the committee for adoption, and in my judgment would have been adopted, had it not been for the fact that there had been a failure to agree between the Governors of the two States. I can well understand the position they take. The addition of the language suggested by the Senator from Oklahoma will leave it so the Bureau of the Budget can follow through in an effort to secure the cooperative acceptance by the two Governors, failing which there could be approval of the authorization of the two projects without it.

Therefore, I urge adoption of the amendments on that basis.

The PRESIDING OFFICER. Is there objection to the amendment—

Mr. THURMOND. Mr. President—  
Mr. KERR. Can we get through this, first?

The PRESIDING OFFICER. Without objection, the amendment is agreed to—

Mr. THURMOND. No. I want to speak on the amendment.

The PRESIDING OFFICER. That was the Chair's understanding.

Mr. KERR. Does the Senator want to oppose the amendment suggested?

Mr. THURMOND. Which one?

Mr. KERR. Both.

Mr. THURMOND. They are separate amendments, are they not?

Mr. KERR. No; they have been accepted together. I have asked that they be accepted together.

Mr. THURMOND. I object to that. Let them be considered separately.

Mr. KERR. The Senator from Georgia has offered his amendment as an amendment to the pending amendment.

Mr. RUSSELL. Mr. President, I had understood that the Senator from Oklahoma obtained unanimous consent to have them accepted together.

The PRESIDING OFFICER. The Chair states that he did. They are accepted and are being treated together.

Mr. THURMOND. Mr. President, I have been in the Stockpiling Subcommittee and have not been able to be present all morning on this matter. I wonder if the distinguished Senators from Oklahoma and Georgia would object to the amendments being voted on separately?

Mr. RUSSELL. Certainly I would object. I do not propose to have the Duke Power Co. come in and ruin the best damsite we have on the Savannah River with this project unless my State can get some benefit from it.

Mr. KERR. I will say to the Senator from South Carolina that his interests are not best served by this procedure. The amendments consisting of the two provisions will be in the bill if they are accepted. We will go to conference, and if both are approved by the Congress, the appropriations will then come up on the project in Georgia.

As soon as the Bureau of the Budget, for the President, approves the project in South Carolina, it will be available for the procedures outlined in the bill with reference to implementing the permission of the Duke Power Co. to build its facility. I see no possible disservice that can occur to his amendment by reason of their being considered together.

Mr. THURMOND. I am sorry the senior Senator from Georgia does not agree to have these amendments voted on separately. I am forced into an awkward position now. The Duke Power Co. has offered to build a dam in South Carolina in the home county of my distinguished senior colleague that would bring into that county more than \$1 million a year in taxes. It will be a steamplant that will be most valuable in generating electricity. I am informed that electricity can be generated much cheaper that way than by building larger hydroelectric dams. I am strongly in favor of that amendment. I regret that the Senators from Georgia have opposed the provision which the senior Senator from South Carolina and I had together



introduced on this subject. It has been pending for some time.

Mr. TALMADGE. Mr. President, will the Senator yield?

Mr. THURMOND. I yield.

Mr. TALMADGE. The pending amendments would authorize the dam the Senators from South Carolina are seeking and also authorize the dam the two Senators from Georgia are seeking.

There is nothing incompatible in the bill with reference to both projects. These projects can be approved any time the Senate is ready to accept both of them and I hope they will be approved.

Mr. THURMOND. I thank the distinguished Senator for those remarks. I can see his position. But I am in the position of favoring one and not the other. When the two projects are combined, I am being forced to vote for both of them when I do not favor the federally constructed, larger dam. The Clark Hill Dam has been built on the Savannah River at a cost of \$100 million. The Hartwell Dam has been built farther up the river at a cost of between \$60 and \$100 million, near Hartwell, Ga. Both those dams now create tremendous reservoirs. They have provided places for boating, fishing, and recreational facilities. But in both instances, undoubtedly today, with modern steamplants, electricity can be generated cheaper by steam. I think it is a mistake to build another dam between those two.

The reason I make that statement is as follows: Former Senator Charles E. Daniels, who preceded me in the U.S. Senate for a brief period, by appointment of Governor Byrnes, has said that if we build this dam between the two, we are going to destroy very fine industrial sites. He has told me, and I am sure he has told the Senators from Georgia, that he can assist, and we feel that others will assist, in bringing hundreds of millions of dollars of industry along the Savannah River, on both sides, which we will not be able to obtain if we build this third dam.

We would have stagnant water. I know of no special advantage to be obtained. In fact, electricity could be generated more cheaply by using a steamplant, such as the Duke Power Co. is willing to do, which would still keep the stream flowing to provide fresh water.

In my judgment, this would be a great mistake. I do not try to speak for the people of Georgia, but I speak for the people of my State. The Governor of my State is bitterly opposed to the proposal to build the Trotters Shoals Dam. The people in Anderson County, from where the distinguished senior Senator from South Carolina comes, are against this amendment. The people in Abbeville County, near there, are against this amendment.

I believe the dam should not be built. The people of Abbeville County have passed resolutions against it.

The people of South Carolina want industry to relocate and build in our State. This section of the Nation badly needs industry. If this Federal dam should be

built it would mean, in practical effect, that we would not get industry.

Mr. President, I wish to cooperate with the able Senators from Georgia, for whom I have high respect. I wish to cooperate in every way I can with them. At the same time, I think we would be making a great mistake, as Senator Daniel has said, by bringing another dam there to deprive that section of the country, on both sides of the river, from getting industry, which it will not be able to get if the third Federal dam is built.

I know of no special virtue which would accrue from the construction of the third dam.

As I say, from the standpoint of the generation of electricity, that could be done cheaper by the use of steam.

The project would greatly hamper the obtaining of industry in the area.

Not only is the Governor of South Carolina opposed, but also the Legislature of South Carolina is opposed. The legislature has passed a resolution opposing the third dam, between Hartwell and Clark Hill.

When I speak against this third dam, I am carrying out the wishes of the people of South Carolina on this subject. It is my personal feeling, too, and a conclusion which has been arrived at after discussion not only with Senator Daniel but also with a number of industrialists, business people and others, in the State of South Carolina, and some in Georgia.

Mr. KERR. Mr. President, will the Senator yield for a question?

Mr. THURMOND. I am pleased to yield.

Mr. KERR. The project which the distinguished Senator from South Carolina favors, as I understand, would bring about construction which would result in a body of water which would be partly in South Carolina and partly in Georgia.

Mr. THURMOND. The project which the Senator from South Carolina favors is a very low dam. It is not a high dam.

Mr. KERR. Either high or low, as I understand it, that would be the situation?

Mr. THURMOND. That is correct. It would be across the Savannah River.

Mr. KERR. It would cross State lines?

Mr. THURMOND. It would not impound water with an overly large reservoir, to include thousands of acres, to have great shore lines, destroying industrial sites. We are desirous of maintaining a fresh water flow in the river, for the industrial sites, in order to increase the economy for the people and to raise their incomes. I am told definitely by our State development board and by others who are interested in this question that they feel it would be a mistake to build the high dam, because industry would be hampered and impeded from coming into this section of the country.

Mr. KERR. If the Senator will answer my questions, I will appreciate it.

If the project which the Senator and his distinguished senior colleague favor should be constructed, it would create a reservoir partly in South Carolina and partly in Georgia?

Mr. THURMOND. No. I do not understand that it would create a reservoir. It would merely provide a very low dam, to enable the Duke Power Co. to use water for steam.

Mr. KERR. Does the Senator know how to build a dam without creating some kind of reservoir?

Mr. THURMOND. In other words, the answer to the question, as I understand the Senator's question, is that it would provide only a very low dam and would not impound water over a tremendous acreage.

Mr. KERR. I did not refer to a tremendous acreage. I said that a dam would create an obstruction in the river.

Mr. THURMOND. It would do that; that is correct.

Mr. KERR. Which would cause an accumulation of water?

Mr. THURMOND. It would cause an accumulation of water, but not covering an extensive area, as would be the case with a high dam.

Mr. KERR. I understand; but it would create a dam which would cause an accumulation of water.

Mr. THURMOND. It would cause an accumulation of water sufficient to provide fresh water for the steamplant.

Mr. KERR. Would that be an accumulation of water?

Mr. THURMOND. It would be an accumulation of water sufficient—

Mr. KERR. Would that—

Mr. THURMOND. Let me answer the question. The Senator asked a question. Let me answer the Senator's question.

It would cause an accumulation of water sufficient to provide water for the steamplant, which would be quite different, as the Senator well knows, because he is an expert on public works projects, from building a high dam and having many thousands of acres flooded with water and taken out of cultivation for the future.

Mr. KERR. I understand that. I am not arguing with the Senator about the virtues of a high dam as distinguished from a low dam. I am merely trying to get the facts in the Record. If I correctly understand the situation, if the project the Senator favors should be constructed, it would result in the building of a low dam.

Mr. THURMOND. A very low.

Mr. KERR. Just a teeny, weeny dam.

Mr. THURMOND. The Senator is exactly correct.

Mr. KERR. A teeny, weeny dam.

Mr. THURMOND. A teeny, weeny dam is exactly what it would be—only enough to slow up the water, to use it to produce steam.

Mr. KERR. There would be the accumulation of a teeny, weeny quantity of water.

Mr. THURMOND. Compared with a high dam. That is correct.

Mr. KERR. But a part of that teeny, weeny amount of water would be in the State of Georgia.

Mr. THURMOND. That is right.

Mr. KERR. And it is correct.

Mr. THURMOND. That is right. And if they wished to build a similar dam, I would have no objection.



Mr. KERR. They have no objection to the building of this dam.

Mr. THURMOND. They are objecting, as I understand.

Mr. KERR. No. They are not objecting to it at all.

Mr. THURMOND. They object, unless we go along with the high dam, which I say would destroy industrial sites in both States. The Governor of our State, the legislature of our State, and the people of our State are all against the high dam, because we need industry.

Mr. KERR. Would any part of the reservoir which would be created by the project sponsored by the Senator from Georgia be in the State of South Carolina?

Mr. THURMOND. It certainly would be. It would flood a great part of the area of South Carolina.

Mr. KERR. Does the river make a bend there?

Mr. THURMOND. It does not make any bend. The Senator knows better than that. The Senator knows that if a high dam were built across the Savannah River between the two States it would flood areas in both States.

Mr. KERR. It would not, unless portions of the reservoir site were in both States.

Mr. THURMOND. The reservoir site would be in both States, of course, if the dam were built over the Savannah River.

Mr. KERR. Are the reservoir sites for both dams to be in both States?

Mr. THURMOND. The Senator is asking a question to which he obviously knows the answer. What does the Senator really wish to know?

Mr. KERR. What I asked.

Mr. THURMOND. The Senator already knows that.

Mr. KERR. Does the Senator from South Carolina know?

Mr. THURMOND. Surely. I know that. I have told the Senator the answer.

Mr. KERR. Will the Senator put it in the RECORD?

Mr. THURMOND. I have already put it in the RECORD. Now, what does the Senator really wish to know?

Mr. KERR. The Senator from Oklahoma understands the project.

Mr. THURMOND. I understand that the Senator from Oklahoma has made up his mind to consolidate these two amendments, and if he does not wish to separate them, I am sorry. I simply requested that they be separated so I could be recorded as being against the high dam, which would affect both States, and as being in favor of the little, teeny, weeny dam, that would merely stop enough water for the steamplant.

If the Senator does not wish to agree to allow a separate vote, there is nothing I can do. I do not wish to be put in the position of voting for an amendment I do not favor. I do not wish to be placed on record as saying that I favor a high dam, when the people of my State do not favor it and I do not favor it. If the Senator will not agree, I will have to ask for a separate vote on the two items.

Mr. KERR obtained the floor.

Mr. JORDAN of North Carolina. Mr. President, will the chairman of the committee yield to me?

Mr. KERR. I yield.

Mr. JORDAN of North Carolina. Under the terms of the amendment, the language would not prevent the Duke Power Co. from building the dam now, would it? It would give permission to proceed to build it?

Mr. KERR. As soon as the President approved it.

Mr. JORDAN of North Carolina. Yes.

Mr. KERR. The Senator is correct.

Mr. JORDAN of North Carolina. It would be necessary to come back to Congress later, for the authorization to build the higher dam?

Mr. KERR. No. This bill would be the authorization.

Mr. JORDAN of North Carolina. I mean, of course, the appropriation.

Mr. KERR. The sponsors of it would have to go before the Appropriations Committee and ask for the money to build it.

Mr. JORDAN of North Carolina. That is what I meant.

Mr. KERR. The Senator is correct.

Mr. JORDAN of North Carolina. They would have to get the money.

Mr. KERR. That is correct; after the President approved it.

Mr. JORDAN of North Carolina. This would not prevent the Duke Power Co. from going ahead and building the dam right now?

Mr. KERR. As soon as the President approved it.

Mr. JORDAN of North Carolina. As soon as the President approves it.

Mr. KERR. The sponsors of the Duke Dam were very careful to provide in their amendment—

Authority granted by the act shall cease and be deemed null and void unless the actual construction of the dam hereby authorized is commenced within 4 years and completed within 7 years from the date of approval of the act.

Mr. JORDAN of North Carolina. In other words, the amendment would not endanger the dam which Duke wishes to build.

Mr. KERR. Not in the least. It would make it possible for them to do so.

Mr. JORDAN of North Carolina. It would make it possible for them to build the dam.

Mr. KERR. The Senator is correct.

Mr. President, I wish to explain the procedural situation. My affection and respect for the Senator from South Carolina [Mr. THURMOND] are very great. I had no purpose in mind to disaccommodate him or in any way to interfere with the orderly processes in which he is interested. I must say that when the amendment was offered he was not in the Senate Chamber.

Mr. THURMOND. Mr. President, will the Senator yield?

Mr. KERR. I yield.

Mr. THURMOND. I was at a meeting of the Committee on Stockpiling.

Mr. KERR. I understand. The Senator made that clear.

Mr. THURMOND. Naturally I thought that the Senator would agree to have a separate vote on the two projects.

Mr. KERR. When the subject came up, the Senator from South Carolina was not in the Senate Chamber. The matter was presented for the junior Senator from South Carolina [Mr. THURMOND] by his senior colleague, for both Senators. When it was presented, the Senators from Georgia said that they were interested in the subject to the extent that if authorization was to be granted for the building of one dam, they wanted authorization for the building of two.

Due to the controversy, which I had not known to be so intense, between the Governors of the two States, the Public Works Committee did not approve either project. The public works bill is before the Senate. The senior colleague of the junior Senator from South Carolina offered an amendment. The Senators from Georgia asked for the inclusion of an authorization for the project that they proposed along with the one proposed in South Carolina. Whereupon, in the ordinary course of events, and in the absence of the distinguished junior Senator from South Carolina—with reference to which the Senator from Oklahoma was certainly not to blame—the Senator from Oklahoma asked unanimous consent that the two amendments be considered together.

No objection was offered. The order was made.

The Senator from Oklahoma cannot now withdraw that unanimous-consent agreement. It can be withdrawn only by unanimous consent. So if the Senator from South Carolina wishes to criticize someone for not giving consent that the unanimous-consent agreement be withdrawn, he should address himself to the Senators from Georgia and not the Senator from Oklahoma. The Senator from Oklahoma is merely a tool to expedite or to help handle the consideration and passage of proposed legislation.

Mr. President, I take no side in the controversy. I have the greatest respect for the Senators from each of the two States. I have mutual respect for the Senators from each of those States. The Senator from Oklahoma is not entitled to be criticized by the Senator from South Carolina for not changing a unanimous-consent agreement of the Senate, because the Senator from Oklahoma has no power to change it.

Mr. THURMOND. Mr. President, will the Senator yield?

Mr. KERR. I yield.

Mr. THURMOND. The Senator from Oklahoma must have had a bad dream last night.

Mr. KERR. I had no bad dreams last night, and I am not dreaming now.

Mr. THURMOND. The Senator has not heard me criticize him. The Senator surely does not recall my criticizing him. I merely asked him if he would assist in having the unanimous-consent agreement repealed so that we could have a separate vote on the two issues. I am not criticizing him.

Mr. KERR. I wish to say to the Senator from South Carolina that we do



not repeal a unanimous-consent agreement.

Mr. THURMOND. It could be withdrawn, repealed, or whatever term should be applied to the situation.

Mr. KERR. It could be.

Mr. THURMOND. The Senator from Oklahoma may use whatever terminology he wishes.

Mr. KERR. I yield to the Senator to propound a unanimous-consent request.

Mr. THURMOND. Mr. President, I wish to make plain that there has been no attempt on my part to criticize the distinguished Senator from Oklahoma.

Mr. KERR. I yield to the Senator to propound a unanimous-consent request.

Mr. THURMOND. I was trying to explain my position, and I wondered if the Senator from Oklahoma and the Senators from Georgia would give their assistance in obtaining unanimous consent for the amendments to be voted upon separately.

The PRESIDING OFFICER. The Chair understands that the Senator from Oklahoma yielded to the Senator from South Carolina for the purpose of propounding a unanimous-consent request.

Mr. THURMOND. Mr. President, in view of the action of the State Legislature of South Carolina and the resolution of the people in the very county in which a high dam would be located, and the wholehearted disapproval of the people of my State, especially in the county where the proposed high dam would be located and built, feeling that it would hurt us in getting industry in that area where we so badly need it, I respectfully ask unanimous consent that the previous unanimous-consent agreement obtained on the subject be rescinded so that the amendments can be voted upon separately.

The PRESIDING OFFICER. Is there objection?

Mr. RUSSELL. Mr. President, reserving the right to object, I wish to make a few brief observations on the comments made by the distinguished Senator from South Carolina. He has attacked the dam that we propose as being a great nuisance and offensive to the people of South Carolina. I think the dam would perhaps be somewhat higher than the one the Senator espouses and that the Duke Power Co. intends to build, but that is still a pretty good dam. If dams on the river are bad, the Duke Power Co. dam would be more than just a little pregnant, so far as dam construction on the Savannah River is concerned. It would be a very high dam.

The Senator said that the people in his State are opposed to the construction of the Trotter Shoal Dam. I assure him that the people of Georgia are equally opposed to the construction of the Duke dam.

The distinguished Senator has said that South Carolina and the county will receive \$1 million a month from the Duke dam.

Mr. THURMOND. A year.

Mr. RUSSELL. The people representing the Duke Power Co. have told me

that they would pay \$3 million to the State.

Mr. THURMOND. I believe the county would receive \$1 million. Anderson County, where the dam would be located, would receive \$1 million a year.

Mr. RUSSELL. Anderson County; but the State would receive many millions of dollars. The State of Georgia would get mudflats from the construction of the dam. That is what we would get. We would get no taxes. They would all be paid on the South Carolina side. We would have been justified in waging war on that private power project, because it is so one sided in favor of our friends from South Carolina. But we did not do it. We did not want to take a dog-in-the-manger attitude and say, "They shall not build this dam here on the Savannah River. We will get nothing. It would not flood any more, or as much land, in South Carolina and yet they would get \$10 million or \$12 million a year out of it. The county and the State of Georgia, with all the unemployment that we hear about, would receive nothing. We would get mudflats."

When we wish to build the dam that has been recommended by the U.S. Army Engineers, which was contemplated by an authorization act passed in about 1934 or 1935—it has been on the books that long—it is said that we should withdraw it because the people of South Carolina are opposed to it.

Mr. President, I have the greatest respect for the people of South Carolina. I can trace my lineage back to some of the people who live there and who contributed mightily to the development of the Palmetto State.

This is an entirely one-sided proposal. We are told, "You ought to take the Duke power project and kill the public power project below it. Both have dams and both have reservoirs, and both would make mudflats on both sides." As a matter of fact, South Carolina would get all the benefit of the Duke project.

I object to the severance of the amendments. The Senator from Georgia would be compelled to object to any such one-sided proposition as this.

Mr. THURMOND. I regret that the Senator from Georgia will not agree that the amendments may be voted on separately. They will cause me to vote for an amendment that contains the high dam and the low dam, which provides steam and does not flood a great deal of land, as the high dam does. It is the high dam that causes the water to go out over thousands of acres.

The low dam merely makes a little reservoir in the stream to enable use of the water for steam. That is its only purpose. If the State of Georgia had the opportunity to obtain a steamplant similar to what it is willing to have on our side, I would be delighted and glad to go along with the State of Georgia.

I have two brothers who are doctors at Augusta, Ga. I have many kinfolk who live in the State of Georgia. I love the State of Georgia. One of my ancestors, who originally came from the State of Virginia, first went to Wilkes

County in Georgia, not far from this section. I am very much interested in the people of Georgia. I have relatives there yet. We would be making a great mistake by building another high dam between the two high dams that are there already, and which would make the water stagnant and which, according to the experts, would make it impossible to attract industry. We would be able to do that if we had fresh water there. The proposed low dam would be a little dam for the purpose of making steam; and it would not flood large areas if it were built.

Mr. RUSSELL. Does the Senator know how high the Duke Power Dam would be? Does he know how many thousands of acres it would flood?

Mr. THURMOND. My understanding is that it would be a very low dam across the river, merely to check the water somewhat and to provide water for the generation of steam. It would not go any higher than the banks of the river on either side; in fact, it would not go nearly as high as the banks in some places. It would not flood a great acreage.

Mr. RUSSELL. Mr. President, will the Senator yield?

Mr. THURMOND. I yield.

Mr. RUSSELL. I believe the Senator said that the dam would be quite low. He indicated by placing his hands near his knees. He ought at least to have some figures to tell how high the dam would be. This is a rather substantial dam. It would cost millions of dollars. It is not merely a knee-high dam.

Mr. THURMOND. The Duke Dam would be 40 feet as compared with 180 feet for the high dam at Trotters Shoals. It is a very low dam. It is a dam to take water for the steamplant. It is not a high type dam, like the Clark Hill Dam, or similar dams, which flood thousands of acres of land. It is merely to provide water for the steamplant. I am sure it would not damage either State, from that standpoint.

I say again that if the State of Georgia had the opportunity to obtain a steam plant of this kind which would provide millions of dollars in taxes to the State of Georgia, I would be glad to cooperate with the State. I do not want to hurt the State of Georgia in any way. The high dam would not generate any taxes. On the contrary, it would take thousands of acres out of taxation, and deprive us of industry. It would prevent industry from coming into the Savannah River valley. The result would be that we would lose numerous industrial plants. Former Senator Charles Daniel told me and the senior Senator from Georgia—I do not know whether he talked with the junior Senator from Georgia also—that he will help them to get industry in this section if this dam is not built. I am sure that the advantages to the people of that section would be much greater if the high dam were not built.

As I said, I do not want to be placed in the position of doing anything to hurt the people of Georgia. I am confident that the little dam for the steam plant would not hurt the State of Georgia. On the other hand, it would provide more



electricity, which would help to bring more industry to both sides of the river. I am confident that the high dam would be a great detriment to both sides of the river and would prevent us from attracting industry that we had anticipated we would get if the dam were built.

Mr. TALMADGE. Mr. President, will the Senator yield?

Mr. THURMOND. I am glad to yield.

Mr. TALMADGE. It is certainly not the desire of the Senators from Georgia to do any harm to the State of South Carolina. On the other hand, it is the position of the Senators from Georgia that we want to help both States. As my senior colleague has pointed out, we are unwilling to have this dam built on the river, affecting both our States, and impounding the water to the exclusion of the project that the people on the Georgia side feel they ought to have. It is the position of the Senators from Georgia that both South Carolina and Georgia ought to have their projects. I am perfectly willing to have both projects. I hope the Senator from South Carolina is willing also.

Mr. THURMOND. The Senator from South Carolina, for reasons he has stated, favors the steamplant, which I believe will help both States to get new industry, but I cannot support separately the high dam which I believe would hurt the industrial development of both States. As long as objection has been made to the unanimous-consent request, it will not be possible now to vote on the amendments separately. Is that correct?

The PRESIDING OFFICER. That is the ruling of the Chair.

The question is on agreeing to the amendments.

Mr. THURMOND. The statement was made by the distinguished Senator from Oklahoma [Mr. KERR] that the senior Senator from South Carolina offered the amendment for the steamplant and that he was authorized by me to add my name as a cosponsor of the amendment. I wish the RECORD to show that we had discussed the amendment and that my senior colleague had my approval to add my name to the amendment. However, at that time I did not anticipate that another amendment would be hooked onto it. I anticipated that there would be a separate vote on the amendments.

The PRESIDING OFFICER. The question is on agreeing to the amendments.

The amendments were agreed to.

Mr. RUSSELL. I move to reconsider the vote by which the amendments were agreed to.

Mr. KERR. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. DIRKSEN. Mr. President, does the Senator from Oklahoma have the floor?

Mr. KERR. I do not. I hope that we may be able to finish with all the amendments that will be offered to the bill, but I do not have the floor.

Mr. DIRKSEN. Mr. President, I merely wish to insert a few comments in the RECORD at this point. The State of Illinois, according to the basic table on page 332 of the report, has 15 or 16 residual projects in the pending bill.

These are set out in rather broad dimensions, and do not quite indicate what projects the bill contains.

I ask unanimous consent that the portion of the index table on page 332 of the report under the caption "Illinois" be inserted in the RECORD at this point in my remarks.

There being no objection, the list was ordered to be printed in the RECORD, as follows:

Illinois:	
Calumet Harbor.....	\$11,464,000
Chicago Harbor.....	1,505,000
Columbia Drainage and Levee District No. 3.....	986,000
Harrisonville and Ivy Landing Drainage and Levee District No. 2.....	1,112,000
Illinois River comprehensive..	71,465,000
Illinois Waterway duplicate locks .....	40,000,000
Kaskaskia River.....	58,200,000
Kaskaskia River levees (local cooperation) .....	
Prairie Du Pont Levee and Sanitary District.....	921,000
Rend Lake.....	35,500,000
Richland Creek.....	4,995,000
Rock River, Rockford.....	7,228,000
Wabash River at Mount Carmel .....	1,417,000

Mr. DIRKSEN. Mr. President, the list requires some additional detailing. I ask unanimous consent to insert in the RECORD a list of the projects in the bill which were sponsored by me. There are some 17 of these in these documents, exclusive of those that are carried in other documents. As I indicated before, these number about 32 projects altogether.

The PRESIDING OFFICER (Mr. PROXMIER in the chair). Is there objection?

There being no objection, the list was ordered to be printed in the RECORD, as follows:

PROJECTS SPONSORED BY SENATOR DIRKSEN WHICH WERE INCLUDED IN THE OMNIBUS RIVER AND HARBOR BILL OF 1962 (S. 3773, S. REPT. 2258)

1. Illinois Waterway, Illinois and Indiana, duplicate locks, \$40 million.

2. Kaskaskia River Navigation project (\$100,000 included in Senate appropriation bill for preconstruction planning), \$58 million.

3. Chicago Harbor, Illinois and Indiana, navigation project, \$1,505,000.

4. Calumet Harbor and River, Illinois and Indiana, navigation improvements, widening and deepening and breakwater protection (\$110,000 included in Senate appropriation for fiscal year 1963 for preconstruction planning), \$11,464,000.

5. Illinois-Mississippi Canal and Mississippi Lake, authorization of an additional \$300,000 to put the canal in condition before transfer to the State (addition to the \$2 million authorized by River and Harbor Act of 1958), \$800,000.

6. Flood control project at and in the vicinity of Mt. Carmel, Ill., on Wabash River across from Indiana Levee No. 5 (\$75,000 included in Senate appropriation bill for 1963 for preconstruction planning), \$1,417,000.

7. Rend Lake project (H. Doc. No. 541, 87th Cong.), \$35,500,000.

8. Illinois River and tributaries, Illinois, Wisconsin, and Indiana, for flood control and related purposes (the 18 projects included are listed on separate hearing), \$71,465,000.

9. Harrisonville and Ivy Landing Drainage District No. 2 in Monroe County, Ill., \$1,112,000.

10. Columbia Drainage and Levee District No. 2 in Monroe County, Ill., \$986,000.

11. Prairie DuPont Levee and Sanitary District in Madison, Monroe and St. Clair Counties, Ill., \$921,000.

12. Richland Creek in Madison, Monroe and St. Clair Counties, \$4,995,000.

13. Pecatonica River, Illinois and Wisconsin, flood control, \$850,000.

14. Rock River at Rockford, Ill., flood control, \$7,228,000.

15. Mississippi River urban areas from Hampton, Ill., to Cassville, Wis., flood control (H. Doc. No. 450, 87th Cong.), \$5,350,000.

16. Mississippi River urban areas from Hampton, Ill., to mile 300 (H. Doc. No. 564, 87th Cong.), \$9,289,000.

17. Authority for the Corps of Engineers to review requirements of local cooperation on Kaskaskia River Levees between Cowden and Vandalia, with view of eliminating cash contributions. (The levees below Carlyle, Ill., do not now require cash contributions.)

Mr. DIRKSEN. Mr. President, in order that a readable document may be made out of what I have in mind, it would be necessary to include information and data which the Army Engineers have submitted to the committee for inclusion in the report. I have asked my staff to assemble this material so that all of it may be placed in the proper places under the 17 categories which I presently have before me.

Mr. President, I ask unanimous consent that the engineering data also be printed as a part of my remarks.

There being no objection, the data were ordered to be printed in the RECORD, as follows:

16. Recommendations: The Board therefore recommends—

(a) That the proposed projects shown in Table 1 herein for the purposes indicated be authorized for construction in the Illinois River basin, with the provision that construction of any one may be undertaken independently of the others upon compliance with the prescribed requirements of local cooperation pertaining thereto; and

(b) That all of the foregoing be accomplished generally in accordance with the plans of the Division Engineers and with such modifications thereof, including reasonable adjustments in storage capacity for water supply and other purposes in the proposed Oakley project, as in the discretion of the Chief of Engineers may be advisable, at an estimated cost of \$71,465,000 for construction to be accomplished by the United States and \$189,000 annually for maintenance and operation of the proposed Oakley project; provided that, prior to construction, local interests give assurances satisfactory to the Secretary of the Army that they will:

(1) With respect to the proposed Oakley project:

(a) Agree to pay the first cost allocated to water supply, such cost being presently estimated at 15.5 percent of the total, or \$4,599,000, with such modification in these amounts as may be necessary to reflect adjustments in the storage capacity for water supply and other purposes, to be paid in a lump sum prior to construction with appropriate adjustments when actual costs are determined,



or in installments prior to commencement of pertinent items, in accordance with construction schedules as required by the Chief of Engineers, or by annual payments, including interest during construction and interest on the unpaid balance, over the life of the project as determined by the Chief of Engineers, or 50 years, whichever is the lesser;

(b) Agree to pay annually as they occur the costs of operation and maintenance allocated to water supply, such costs being presently estimated at 22.7 percent of the total, or \$43,000, with such modification in these amounts as may be necessary to reflect adjustments in the storage capacity for water supply and other purposes;

(c) Maintain all roads and bridges in the reservoir area and over the improved channel downstream from the dam in accordance with regulations prescribed by the Secretary of the Army;

(d) Hold and save the United States free from all water-rights claims resulting from construction and operation of the project, and

(e) Operate the existing non-Federal dam and reservoir at Lake Decatur for flood control in accordance with regulations approved by the Secretary of the Army; and

(2) With respect to the proposed local protection projects:

(a) Furnish without cost to the United States all lands, easements, rights-of-way, and ponding and spoil-disposal areas necessary for construction of the project;

(b) Hold and save the United States free from damages due to the construction works;

(c) Bear the expense of relocating and altering highways, highway bridges (except underpinning), utilities, buildings, interior drainage facilities, pipelines, and other structures, except railroad bridges and approaches;

(d) Prescribe and enforce regulations satisfactory to the Secretary of the Army to prevent encroachment on the improved channels and ponding areas; and

(e) Maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army.

17. It is further recommended that:

(a) The general comprehensive plan for flood control and other purposes in the upper Mississippi River basin, authorized by the Flood Control Act of 1938, be modified to delete therefrom the Chandlerville Reservoir No. 2, Sangamon River; and

(b) The following projects, authorized by the Flood Control Act of 1936, be deauthorized:

(1) Sangamon River, mouth of Salt Creek to Roby, Ill., channel straightening for flood control at an estimated cost of \$2,510,000;

(2) Sangamon River and Salt Creek, clearing channels at 50 bridge sites (Sangamon River portion only) at an estimated cost of \$42,000;

(3) Clear Lake Levee at junction of Sangamon and Illinois Rivers in Illinois at an estimated cost of \$279,000; and

(4) McGee Creek Drainage and Levee District, Illinois River at an estimated cost of \$597,000.

18. Of the Federal construction cost of \$71,465,000 for the recommended works, the net cost to the United States is estimated at \$66,866,000 after reimbursement by non-Federal interests of the costs allocated to water supply. The net annual cost to the United States for maintenance and operation of the proposed Oakley project is estimated at \$146,000.

For the Board:

KEITH R. BARNEY,  
Major General, U.S. Army, Chairman.

#### REPORT OF THE DISTRICT ENGINEER SYLLABUS

The Illinois River is the largest tributary of the Mississippi River above the mouth of the Missouri River. Average annual flood damages in the Illinois River basin, exclusive of the Kankakee and Fox River basins, are estimated to be \$8,942,000 of which about \$4 million occur along the main stem of the Illinois River.

Existing flood control projects do not afford adequate protection to all areas from floods which can be expected to occur and there

is need for additional protection to some of these areas as well as to areas which have no flood protection.

There is a need in the basin for surface storage of water for domestic and industrial use. There is also need for additional recreational opportunities for the residents of the central portion of the State of Illinois and for conservation of fish and wildlife resources.

Flood protection and allied water uses for 80 projects have been analyzed. The reporting officers find that 18 of these projects are individually justified. They include 16 local flood protection projects, comprising levees, floodwalls, channel improvement and interior drainage facilities; a multipurpose reservoir for flood control, water supply and recreation and associated downstream channel improvement; and remedial work in connection with the completed Federal flood control project at the mouth of the Sangamon River. The overall benefit/cost ratio for the entire plan is 1.2. They therefore recommend adoption of these 18 plans of improvement and participation in maintenance and operation; provided certain items of local cooperation are met.

The estimated cost to the United States for the 18 improvements, is \$64,687,500 for construction and \$135,000 for annual maintenance and operation. The recommended projects are as follows:

Project	Federal construction cost	Federal annual maintenance and operation cost	Benefit-cost ratio
Local flood protection, urban areas:			
City of Peoria.....	\$10,876,000	-----	1.01
Community of Meredosia, and Meredosia, Willow Creek, and Coon Run drainage and levee district.....	1,990,000	-----	1.2
Community of Eldred.....	460,000	-----	1.7
Local flood protection, agricultural areas:			
Indian Creek area.....	3,660,000	-----	1.1
Meredosia Lake and Willow Creek drainage and levee district.....	1,620,000	-----	1.03
McGee Creek drainage and levee district.....	3,490,000	-----	1.1
Scott County drainage and levee district.....	2,820,000	-----	1.2
Big Swan drainage and levee district.....	2,560,000	-----	1.2
Hillview drainage and levee district.....	2,110,000	-----	1.5
Hartwell drainage and levee district.....	2,190,000	-----	1.1
Keach drainage and levee district.....	1,890,000	-----	1.0
Eldred and Spankey drainage and levee district.....	2,390,000	-----	1.7
Nutwood drainage and levee district.....	1,650,000	-----	1.5
Lake Fork of Salt Creek.....	1,271,000	-----	1.6
Farmers levee and drainage district.....	711,000	-----	2.1
Clear Lake special drainage district.....	1,910,000	-----	1.3
Remedial work near mouth of Sangamon River.....	33,500	-----	
Reservoir: Oakley Reservoir and associated downstream channel improvement.....	23,056,000	\$135,000	1.2
Total for 18 projects.....	64,687,500	135,000	1.2

Mr. DIRKSEN. Mr. President, I alluded to the fact that there were 18 projects dealing with the Illinois River Basin, including States of Wisconsin and Indiana, all of which have been recommended, and on which engineering data are available. I ask unanimous consent

that the data and excerpts from the report also be printed as a part of my remarks.

There being no objection, the data were ordered to be printed in the Record, as follows:



[From H. Doc. No. 472, 87th Cong., 2d sess.]

TABLE I.—Recommended projects—Illinois River Basin, Wis., Ind., and Ill.

[Costs and benefits in thousands of dollars, March 1961 prices]

Project	Stream	Purpose	Costs						Annual benef- its	Annual charges	Benefit- cost ratio
			Construction <sup>1</sup>			Annual operation, maintenance and replacement					
			Fed- eral	Non- Fed- eral	Total	Fed- eral	Non- Fed- eral	Total			
Oakley Reservoir and channel improvement.....	Sangamon River.....	Flood control, municipal and industrial water sup- ply, and recreation.	25,022	4,599	29,621	146	43.0	189.0	1,624.0	1,388.0	1.2
Peoria, Ill.....	Illinois River.....	Flood control.....	11,855	1,831	13,686	0	55.4	55.4	588.0	581.0	1.01
Meredosia, Ill., and Meredosia, Willow Creek, and Coon Run drainage and levee districts.	do.....	do.....	1,940	398	2,338	0	4.1	4.1	121.7	95.2	1.3
Eldred, Ill.....	do.....	do.....	450	104	554	0	0	0	40.3	21.4	1.9
Indian Creek area.....	do.....	do.....	3,540	311	3,851	0	3.5	3.5	173.4	153.4	1.1
Meredosia Lake and Willow Creek drainage and levee district.	do.....	do.....	1,570	45	1,615	0	0	0	66.6	60.9	1.1
McGee Creek drainage and levee district.....	do.....	do.....	3,380	106	3,486	0	2.3	2.3	160.0	136.0	1.2
Scott County drainage and levee district.....	do.....	do.....	2,710	210	2,920	0	0	0	140.0	112.8	1.2
Big Swan drainage and levee district.....	do.....	do.....	2,340	173	2,513	0	0	0	130.0	96.9	1.3
Hillview drainage and levee district.....	do.....	do.....	2,030	118	2,148	0	0	0	127.1	82.2	1.5
Hartwell drainage and levee district.....	do.....	do.....	2,080	97	2,177	0	0	0	95.4	82.9	1.2
Keach drainage and levee district.....	do.....	do.....	1,810	97	1,907	0	0	0	78.8	72.9	1.1
Eldred and Spankey drainage and levee dis- trict.	do.....	do.....	2,290	125	2,415	0	0	0	169.1	92.3	1.8
Nutwood drainage and levee district.....	do.....	do.....	1,570	82	1,652	0	0	0	104.2	63.1	1.7
Lake Fork of Salt Creek (Sangamon River).....	Lake Fork.....	do.....	1,385	131	1,516	0	17.8	17.8	116.4	76.6	1.5
Farmers drainage and levee district.....	Sangamon River.....	do.....	775	10	785	0	5.9	5.9	70.2	34.7	2.0
Clear Lake special drainage district.....	do.....	do.....	2,082	252	2,334	0	24.3	24.3	139.8	114.3	1.2
Remedial work near mouth of Sangamon River.....	do.....	do.....	37	1	38	0	.3	.3	-----	1.9	-----
Total.....	-----	-----	66,866	8,690	75,556	146	156.6	302.6	-----	-----	-----

<sup>1</sup> Exclusive of preauthorization study costs.

## ILLINOIS WATERWAY, ILL. AND IND.

(H. Doc. 31, 86th Cong.)

Location: The Illinois Waterway provides a channel for barge navigation between the Mississippi River, 38 miles above St. Louis, and Lake Michigan at Chicago.

Report authorized by: House Rivers and Harbors Committee resolution adopted March 16, 1943; Senate Public Works Committee resolution adopted March 24, 1956.

Existing project: Provides for nine locks and six dams; navigation channel 9 feet deep in the Illinois and Des Plaines Rivers from the mouth of the Illinois River to Lockport, a distance of 291.1 miles; upstream extension and branch channels 9 feet deep in the Chicago Sanitary and Ship Canal, Chicago River, Calumet-Sag Channel, Little Calumet River, Calumet River, and Grand Calumet River; and appurtenant improvements including bridge changes. The project is complete except for construction of two locks, one on Calumet River and the other on Grand Calumet River and improvements of the branch channel in the Grand Calumet River.

Navigation problem: Commerce on the Illinois River has increased since the improved waterway to Chicago was opened from about 1.7 million tons in 1935 to 21.4 million tons in 1955. Most of the traffic delays now occur at the locks because many tows require rearrangement to permit a single lockage and the larger tows must make a double lockage. The congestion at the locks resulting from these delays will be more critical as the traffic increases.

Recommended plan of improvement: Modification of existing project to provide for construction of supplemental locks, 110 feet wide and 1,200 feet long, at the seven existing lock sites on the Illinois and Des Plaines Rivers. (The first two locks estimated to be needed by 1968 and the last three by 1977.)

Estimated cost (price level of January 1957): All Federal, \$114,652,000.

Project economics:

Annual charges.....\$4,594,300  
Annual benefits.....22,320,000

(All transportation savings.)

Benefit-cost ratio: 4.9.

Local cooperation: Provided that prior to construction local interests agree that they will assume title to, and maintain and operate the new bridge across the lower approach to the Brandon Road lock when the bridge is placed in service.

Comments of State and Federal agencies: Fish and Wildlife Service: No interest in project.

State of Illinois: Concurs in conclusions and recommendations.

Comments of the Bureau of the Budget: Notes that commerce on the waterway has increased at a rapid rate since 1935; however, it states that a projection of the past rate of growth is by no means certain. The BOB does not question the economic justification, but considers authorization 10 to 19 years in advance of the need is premature and accordingly urges that the report be regarded only as a study of future need, and that the estimates on commerce and average tons per lockage be brought up to date in a future report to Congress in 5 years.

Remarks: The committee notes the exceedingly high benefit-cost ratio of 4.9 for this project. It also notes the comments of the Bureau of the Budget which questions the estimates of traffic growth, and that another report be submitted to Congress in 5 years. Since almost 4 years of the 5-year period the Bureau of the Budget referred to has elapsed, the committee sees no necessity of submitting another report in the near future. It recommends authorization of \$40 million for initiation and partial accomplishment of the project at this time.

## KASKASKIA RIVER, ILL.

(S. Doc. 44, 87th Cong.)

## Description of Project

Location: The Kaskaskia River rises in Champaign County in eastern Illinois and flows southwesterly about 325 miles to the Mississippi River at a point 60 miles downstream from St. Louis, Mo., a short distance above Chester, Ill.

Authority for report: Senate Public Works Committee resolution adopted August 17, 1954. The report has been transmitted to

Congress and printed as Senate Document 44, 87th Congress.

Existing project: The original Federal improvement of the river for navigation by deepening to 3 feet to mile 12, and removing snags to mile 22, was abandoned in 1895. The river is not used by commercial craft at the present time. The existing Federal project for flood control and other purposes on the Kaskaskia River provides for dams and reservoirs at Carlyle and Shelbyville, and levees between Cowden and Vandalia, below Carlyle, and New Athens. Carlyle Reservoir is under construction and planning is underway on the Shelbyville project. Work has not started on the levee. The reservoirs, in addition to reducing floodflows, would aid navigation by augmenting flows in the Mississippi River, provide municipal and industrial water supply, benefit fish and wildlife, and afford opportunity for recreational developments.

Navigation problems: Local interests desire a 9-foot navigation channel in the lower 50 miles of the Kaskaskia River to facilitate the outbound movements of coal and grain, and to augment the local economy.

Recommended plan of improvement: Provides for a channel 9 feet deep and 200 feet wide from the mouth of Kaskaskia River to Fayetteville, Ill., by enlarging the present channel where required, and making overbank cuts to eliminate sharp bends; and a dam at mile 4 with a single lock 84 feet wide and 600 feet long. The plan of improvement also provides for modification of the storage allocations in the Carlyle and Shelbyville Reservoirs, to provide water for Kaskaskia River navigation in lieu of Mississippi River navigation; and future reallocation of storage in the two reservoirs when additional water is needed for navigation, if the use of such storage is found by the Chief of Engineers to be feasible and more economical than pumping water from below the dam into the navigation pool.

Estimated cost (price level, January 1960):

Federal.....\$58,200,000  
Non-Federal.....2,300,000

Total.....60,500,000



## Project economics:

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$2,223,300	\$119,000	\$2,342,300
Maintenance and operation.....	270,000	0	270,000
Replacements.....	17,700	0	17,700
Navigation aids.....	19,000	0	19,000
Total.....	2,530,000	119,000	2,649,000

Annual benefits: Transportation savings on coal movements, \$5,120,000.

Benefit-cost ratio: 1.9.

Local cooperation: Provide without cost to the United States all lands, easements, and rights-of-way; hold and save the United States free from damages; make all necessary alterations to sewer, water supply, drainage, and other utility facilities; bear a proportionate share of the costs of relocations of railroad and highway bridges; remove one highway bridge at own expense; maintain all bridges over the improved waterway; provide necessary loading and mooring facilities; provide terminal and transfer facilities; and establish agency for controlling withdrawal of water from river below Carlyle Dam.

Comments of the State and Federal agencies:

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: No objection.

State of Illinois: Approve project.

Comments of the Bureau of the Budget: The Bureau of the Budget notes that the Acting Chief of Engineers refers to the uncertainty of railroad rate adjustments that may be proposed in the future and the action that the Interstate Commerce Commission may take thereon, and that he recommends, if the project is authorized, a reevaluation of project economic justification in light of rates then existing, would be made when funds are requested for construction. The Bureau of the Budget concurs in this recommendation. The Bureau of the Budget further advises that there would be no objection to the submission of the proposed report to the Congress.

Benefits: The major benefits that have been assigned to the improvement of the lower Kaskaskia River for navigation are transportation savings for movement of coal. Coal reserves adjacent to the Kaskaskia River are substantial, with an estimated 1.8 to 2 billion tons located within 15 miles of the proposed navigation project. Coal requirements for market areas in which this coal can compete are said to be increasing rapidly. The improved waterway would permit the movement of a maximum of about 20 million tons of coal annually. The estimated annual benefits are based on an average annual waterborne movement of about 15,200,000 tons throughout the life of the project, at a transportation saving of about 35 cents per ton. Benefits from the improvement in the economic conditions of the area are real, but have not been evaluated. The economic ratio for the project is 1.9 to 1.

A project for canalization of the Kaskaskia River between Fayetteville and the Mississippi River, by construction of a dam and 84- by 600-foot lock at mile 4 and a channel 200 feet wide and 9 feet deep, appears technically feasible and economically justified. Although other commodities may eventually move over the waterway, the principal known commodity that will use it and the one on which the economies are based is coal. Between New Athens and Fayetteville there are proven coal reserves of approximately 1.8 billion tons within 15 miles of the waterway. This coal is of superior quality and can be marketed to compete successfully with

other coalfields in the midwestern region of the United States. If a waterway were provided, it would result in a savings to the users of coal, because of the reduction in transportation costs. Although the development of nuclear fuels is progressing and may be of significance by the end of the present century, their widespread use to compete with coal is not a certainty.

The southern Illinois region was stated to be a depressed area with a large pool of manpower available, but also with a high rate of unemployment. Mining of coal in the area has decreased in recent years because of the high cost of transportation. Local interests have expressed the belief that provision of the proposed navigation project will attract heavy industry to the region. With coal, water, limestone, and cheap transportation available in this area, and a large supply of iron ore located a short distance away in Missouri, extensive industrial development is anticipated. The committee was advised that two private utility companies are now planning to construct two steam electric generating plants on the river adjacent to the navigation project, if its eventual construction appears eminent. Kaiser Aluminum Co. has also acquired an area for the future location of an aluminum plant in event the Kaskaskia River is canalized. Extensive use of the waterway for transportation of corn, wheat, oats, and soybeans, was forecast. Proponents of the project stated that operation of the Kaskaskia River navigation project would be of great benefit to the railroads of the area, due to increased freight movement from increased industrial activities, new markets that would be opened, and that coal moved by water would replace very little of that now moving by rail. These proponents believe the prospective coal tonnages that would move over the improved waterway, and the savings in transportation costs are conservative.

Opponents of the recommended navigation project, primarily the railroad interests, have expressed their belief that such project would prove detrimental to the southern Illinois region, as it would force the closing of coal mines removed from close proximity to the Kaskaskia River. Distressed areas of eastern Kentucky and West Virginia would also be adversely affected by production of coal for movement by water routes to the Great Lakes region, and making the Kaskaskia coal more competitive. Coal was stated to be sold on margins of less than \$0.50 per ton, an amount approximately equal to the estimated savings by use of water transportation. Another adverse effect on the local economy was claimed if rail shipments are curtailed, from reduction of railroad payrolls in the area and local taxes paid by such railroads. Opponents of the project also claim that prospective coal tonnages that would be moved over an improved waterway are unrealistic, and that the project would benefit private and exempt carriers, particularly one large coal producer who has constructed a railroad from the coalfields and docks on the Mississippi River for movement of the coal by water transportation. The taxpayers of the Nation would be required to pay for the anticipated benefits that would be provided by the navigation project, which would adversely affect the large investment the railroads have in this region. It was stated that at the present there are no landlocked coal mines in the area.

Under presently authorized plans of operation, storage is included in the Carlyle and Shelbyville Reservoirs for navigation releases for the middle and lower Mississippi River. In his report, the Chief of Engineers proposes assignment of additional storage in these upstream reservoirs to navigation, or provision of pumping facilities at the navigation dam to pump upstream the water lost in each lockage. Final decision was to

be deferred until the need became evident. Since the low-water periods on the Kaskaskia River do not coincide with those on the Mississippi River, early consideration should be given to this matter to assure continued supply of water for navigation and industrial users during drought periods.

The modification of bridges where required as a part of the proposed improvement is included in the cost of the project. The Illinois Division of Highways objected to the use of lift spans on Federal and State highways in the interest of traffic safety and continuity of traffic flow. To meet this requirement, high-level spans with adequate vertical and horizontal clearances have been used in making the estimates of cost. One new highway bridge will be built over a new channel. One highway bridge, on State Highway No. 3 at New Athens, Ill., will be constructed by the State on a new alignment. Local interests will be required to remove the old bridge at their own expense.

## COMMITTEE VIEWS

The committee is of the opinion that in the lower Kaskaskia Basin there are adequate reserves of minable coal of such quality that it can compete with other coalfields in this region if a waterway were available for transportation, and that based upon the present economic trends of the United States, there will be a large market for this coal. The area is rich in natural resources and susceptible to extensive industrial development. Local residents are in support of the project.

The committee believes it feasible and advisable to improve the Kaskaskia River between Fayetteville, Ill., and the Mississippi River for modern barge transportation by a lock and dam located at mile 4, by channel straightening, deepening, and widening, by the provision of supplemental water supply from Carlyle and Shelbyville Reservoirs, and by abandonment, replacement, or alteration of all bridges which now cross the waterway. The proposed improvement would reduce the distance from the Mississippi River to Fayetteville, Ill., from 50 miles to 38 miles by straightening and realignment of the channel and cutting across sharp bends. The committee further believes that the Kaskaskia River project would be a valuable addition to the inland waterway system of the United States, and be a further step in the development of the natural and water resources of our country.

The committee is aware that estimated benefits from the recommended improvement is based on present freight rates in the area, that an authorization of such improvement might result in lowering existing rates for rail movement of coal from the area, and approves the recommendations of the Chief of Engineers and the Bureau of the Budget, that reevaluation of the project economics in light of actual rates then existing should be undertaken prior to initiation of construction thereon.

The committee notes the favorable economic ratio of this project and believes that its authorization is economically justified.

CHICAGO HARBOR, ILL.

(H. Doc. No. 485, 87th Cong.)

Location: Chicago Harbor is near the south end of Lake Michigan, 14 miles north of the Illinois-Indiana State line, on the southwestern shore of the lake.

Authority: Similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively.

Existing project: The existing Federal project for Chicago Harbor generally provides for an inner breakwater, in two sections, enclosing an inner basin of about 224 acres; an exterior breakwater in three sections enclosing an outer basin of about 900 acres; maintenance dredging to a depth of 21



feet of a portion of the inner basin and also of the entrance to Chicago River to Rush Street over a varying width; and maintenance of a section of the north pier. The existing deep-draft Federal project for Chicago River generally provides for maintenance dredging to 21 feet in the main river, the North Branch, the North Branch Canal, and the North Branch turning basin, all to within 20 feet of existing docks.

**Navigation problem:** Existing project depths in the outer harbor are not adequate to permit vessels in the oversea traffic to take full advantage of the depth being provided in the connecting channels and the St. Lawrence Seaway.

**Recommended plan of improvement:** Provide for a lake approach channel 800 feet wide and 29 feet deep from the breakwater lakeward for a distance of about 6,600 feet and a channel and maneuver area inside the harbor entrance with a maximum width of 1,300 feet and a depth of 28 feet.

**Estimated cost (price level of July 1961):**

Federal..... \$1,505,000  
Non-Federal..... None

Total..... 1,505,000

**Project economics:**

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$57,000	0	\$57,000
Maintenance.....	11,000	\$1,000	12,000
Total.....	68,000	1,000	69,000
Annual benefits: Transportation savings.....			423,000

**Benefit-cost ratio: 6.1.**

**Local cooperation:** Hold and save the United States free from damages that may result from construction and maintenance of the improvement; and maintain, without cost to the United States, depths in berthing areas serving the public terminal commensurate with the recommended project depths. Local interests have indicated a willingness and ability to comply with the terms of local cooperation.

**Comments of the State and Federal agencies:**

Department of the Interior: Favorable.

State of Illinois: Favorable.

Comments of the Bureau of the Budget: No objection.

**Remarks:** The proposed improvement would permit vessels in the oversea traffic to take full advantage of the depth provided in the connecting channels and the St. Lawrence Seaway. The project is amply justified.

**4. CALUMET HARBOR AND RIVER, ILL. AND IND.**  
(H. Doc. 581, 87th Congress)

**Location:** Calumet Harbor is at the south end of Lake Michigan, on the State line between Illinois and Indiana.

**Authority:** Interim report is in partial response to similar resolutions adopted by the Public Works Committees of the U.S. Senate and House of Representatives on May 18, 1956, and June 27, 1956, respectively.

**Existing project:** The existing Federal project for Calumet Harbor and River provides for an outer harbor protected by a breakwater 12,500 feet long; an approach channel 3,200 feet wide and 29 feet deep; an outer harbor channel and anchorage 3,000 feet wide and 28 feet deep; a channel in the river 290 feet wide and 27 feet deep up to the Elgin, Joliet & Eastern Railway Bridge, thence at least 200 feet wide and 25 feet deep to 111th Street, 23 feet to 114th Street, 21 feet at 122d Street, and 21.5 feet to and including turning basin No. 5; widening and straightening the river, except through the rock cut, to

within 20 feet of bulkhead lines; five turning basins along the river; and closing the existing gap between the breakwaters. The existing project for Lake Calumet provides for dredging to a depth of 21 feet an area 670 feet wide and 3,000 feet long at the south end of the lake and an entrance channel 300 feet wide from Calumet River at turning basin No. 5.

**Navigational problem:** Existing project depths are not adequate to allow vessels calling at points along the river and in Lake Calumet to be loaded to the drafts permitted by the Great Lakes connecting channels and the St. Lawrence Seaway. Widening in the rock section of the river, enlargement of turning basins and extension of the existing project are needed for safe navigation and development of the harbor.

**Recommended plan of improvement:** Provides for: a depth of 27 feet in earth and 28 feet in rock over a minimum width of 200 feet in Calumet River from the Elgin, Joliet, and Eastern Railway Bridge to turning basin No. 5; widening the channel through the rock section of Calumet River, together with the presently authorized widening and straightening of the river, all to a depth of 27 feet in earth and 28 feet in rock; a depth of 27 feet over the authorized limits of turning basin No. 1 on Calumet River; enlarging turning basin No. 5, and deepening the enlarged basins to 27 feet; elimination of turning basins Nos. 2 and 4; a depth of 27 feet within authorized limits to Lake Calumet and its entrance channel; and extending the existing project limits in Lake Calumet 3,000 feet northward at a width of 1,000 feet and a depth of 27 feet. Further, that the uncompleted work authorized in 1935 for the related river section be combined with the additional work now recommended for that section (exclusive of turning basins Nos. 2 and 4) and the whole be treated as a single further improvement, with estimated cost of \$13,479,000 for construction, including \$2,015,000 for work previously authorized and \$11,464,000 for additional work now recommended, and that this combination supersede the authorization for construction of the pertinent uncompleted portion of the work authorized by the River and Harbor Act of 1935.

**Estimated cost (price level of January 1961):**

Federal..... \$11,464,000  
Non-Federal..... 12,081,000

Total..... 23,545,000

**Project economics:**

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$433,000	\$560,000	\$993,000
Maintenance dredging.....	17,000		17,000
Total.....	450,000	560,000	1,010,000
Annual benefits: Transportation savings.....			2,393,000

**Benefit-cost ratio: 2.4.**

**Local cooperation:** Provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the projects, including suitable areas required for initial disposal of spoil and necessary retaining dikes, bulkheads, and embankments therefore or the cost of such retaining works; hold and save the United States free from damages due to the construction works and maintenance of the improvements; provide and maintain without cost to the United States depths in berthing areas commensurate with depths provided in the related project areas; accomplish without cost to the

United States such alterations as may be required in docks, bulkheads, submarine utility facilities, and other structures; provide such bridge protection as may be required; and provide adequate bulkheads where required in connection with enlargement of the river channel and turning basins or, in lieu of such bulkheads, furnish releases saving the United States harmless against any claims for damages from erosion, bank losses or other consequences of the work; and provided further that work on any separable feature may be undertaken independently of any other, whenever funds for that feature are available and the pertinent local cooperation has been furnished.

**Comments of the State and Federal agencies:**

Department of the Interior: Favorable.

State of Illinois: Favorable.

State of Indiana: Favorable.

Comments of the Bureau of Budget: No objection.

**Remarks:** This harbor is an integral part of the system of Great Lakes harbors and connecting channels. The improvement as proposed is necessary and justified to permit full loading of the large vessels.

**ILLINOIS AND MISSISSIPPI CANAL**

The River and Harbor Act of 1958 authorized transfer of the now obsolete Federal project known as the Illinois and Mississippi Canal to the State of Illinois. This is an old navigation project which has long been in disuse, insofar as commercial navigation is concerned. It is used extensively, however, by small pleasure craft. The 1958 act authorized \$2 million to place the structures in safe condition to permit complete abandonment. The item in the present bill increases the authorization of \$2,800,000. The committee considers this increase in authorization to be desirable.

**WABASH RIVER AT MOUNT CARMEL**

(H. Doc. 573, 87th Cong.)

**Location:** Mount Carmel is on the west bank of the Wabash River in southeastern Illinois, about 35 miles southwest of Vincennes, Ind.

**Authority:** Flood Control Act, July 24, 1946.

**Existing project:** None.

**Flood problem:** The most severe flood of recent times was that of March 1913. Recurrence of the March 1913 flood would cause damages of Mount Carmel and vicinity estimated at \$402,000 under 1961 prices and conditions. The future average annual flood damage between Greathouse Creek at Mount Carmel, mile 93.6 and Grand Rapids, mile 97.1 after completion of the Wabash River levee plans is estimated at \$125,000.

**Recommended plan of improvement:** Provides for construction of 15,900 feet of levee and 1,465 feet of concrete wall with the necessary appurtenant works. The plan of improvement would provide complete protection to practically all of the urban areas within the city limits subject to flooding and some of the agricultural areas.

**Estimated cost (price level of July 1961):**

Federal..... \$1,417,000  
Non-Federal..... 100,000

Total..... 1,517,000

**Project economics:**

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$52,500	\$5,500	\$58,000
Maintenance and operation.....	500	13,500	14,000
Total.....	53,000	19,000	72,000
Annual benefits: Flood damages prevented.....			119,200



Benefit-cost ratio: 1.7.

Local cooperation: Furnish lands and rights-of-way; hold and save the United States free from damages; and maintain and operate the works after completion. Local interests are willing to comply with the requirements of local cooperation.

Comments of the State and Federal agencies:

Department of the Interior: No objection.

Department of Agriculture: No objection.

Department of Commerce: Favorable.

Department of Health, Education, and Welfare: Favorable.

State of Illinois: Favorable.

Comments of the Bureau of the Budget:

The Bureau of the Budget states that the district engineer's report indicates that installation of authorized agricultural levees in the vicinity of Mount Carmel, principally levee unit No. 5, would, because of stream confinement, increase flood stages and compound flood problems at Mount Carmel. For this reason, the project at Mount Carmel, as a whole, would be economically justified and would be desired by local interests only if levee unit No. 5 is built. Analysis of information in the report also indicates that the selected plan of improvement includes, as separate features, levee protection for two relatively undeveloped tracts of flood plain land at a first cost of \$860,000. As the plan is formulated and evaluated in the report, protection of the tracts would not be economically justified, and the district engineer's report does not make clear why the selected plan includes these features. The level of protection they afford will, however, apparently counteract the damages from increased flood stages expected to result from installation of levee unit No. 5. The Bureau has recently received from the Corps of Engineers information not contained in the report which indicates conditions under which protection of the tracts could be regarded as economically justified.

While the Bureau of the Budget would have no objection to inclusion of the tracts in the project, the Bureau suggests that the informational deficiencies of the report should be remedied by making available to the Congress an adequate explanation of the basis on which the two tracts were included in the selected plan.

The Bureau of the Budget has no objection to submission of the report to Congress.

Action by the Secretary of the Army: The Secretary states that further information will be made available to Congress as requested.

Remarks: The project will protect the urban areas at Mount Carmel, Ill., and 380 acres of agricultural areas from flood stages of the Wabash River. Mount Carmel is the county seat and principal marketing center of Wabash County. There are a number of diversified industries in the town including the manufacture of radios, record changers, electronic equipment, and automotive wrenches. The committee considers authorization of this project advisable.

#### ILLINOIS RIVER AND TRIBUTARIES

(H. Doc. 472, 87th Cong.)

Location: The Illinois River Basin is located in portions of Illinois, Wisconsin, and Indiana.

Authority: Resolutions adopted by the Committee on Flood Control of the House of Representatives, United States, one on July 28, 1937, and one on May 14, 1941; and in review of reports in response to an authorization contained in section 6 of the Flood Control Act approved August 11, 1939.

Existing project: Federal improvements in that part of the basin under consideration include 53 authorized flood control projects, of which 34 local protection projects are completed, 1 is under construction, and 18, including Chanderville No. 2 Reservoir on Sangamon River, have not been started; and

the Illinois Waterway for navigation, which provides for a channel 9 feet deep over varying widths between Lake Michigan and the Mississippi River by means of 8 locks and 7 dams. Also, the former Chautauqua Drainage and Levee District has been converted to a wildlife refuge and is operated by the U.S. Fish and Wildlife Service.

Water resources problems: Flood problems in the basin are caused by inadequate channel capacities and, in some cases, by encroachment on the stream-carrying capacity by bridges and other structures. The sources of municipal and industrial water supply in the basin are wells, streams and reservoirs. Increasing demands are causing depletion and imposition of limited usage.

Recommended plan of improvement: Consists of a multiple-purpose dam and reservoir at Oakley and associated downstream channel improvement project, enlargement of existing levees and/or new levees and floodwalls and channel improvement for protection of 3 urban and 13 agricultural areas, remedial work at the mouth of the Sangamon River, at a Federal construction cost of \$71,465,000, the net cost to the United States is \$66,866,000 after reimbursement by non-Federal interests of the costs allocated

#### Projects economics:

[In thousands of dollars, March 1961 prices]

Project	Total cost	Total annual charges	Total annual benefits	Benefits-to-cost ratio
Oakley Reservoir and channel improvement.....	29,621	1,388.0	1,624.0	1.2
Peoria, Ill.....	13,686	581.0	588.0	1.01
Meredosia, Ill., and Meredosia, Willow Creek, and Coon Run Drainage and Levee Districts.....	2,338	95.2	121.7	1.3
Eldred, Ill.....	554	21.4	40.3	1.9
Indian Creek area.....	3,851	153.4	173.4	1.1
Meredosia Lake and Willow Creek Drainage and Levee Districts.....	1,615	60.9	66.6	1.1
McGee Creek Drainage and Levee District.....	3,486	136.0	160.0	1.2
Scott County Drainage and Levee District.....	2,920	112.8	140.0	1.2
Big Swan Drainage and Levee District.....	2,513	96.9	130.0	1.3
Hillview Drainage and Levee District.....	2,148	82.2	127.1	1.5
Hartwell Drainage and Levee District.....	2,177	82.9	95.4	1.2
Keach Drainage and Levee District.....	1,907	72.9	78.8	1.1
Eldred and Spankey Drainage and Levee District.....	2,415	92.3	169.1	1.8
Nutwood Drainage and Levee District.....	1,652	63.1	104.2	1.7
Lake Fork of Salt Creek (Sangamon River).....	1,516	76.6	116.4	1.5
Farmers Drainage and Levee District.....	785	34.7	70.2	2.0
Clear Lake Special Drainage District.....	2,334	114.3	139.8	1.2
Remedial work near mouth of Sangamon River.....	38	1.9		
Total.....	75,556			1.2

Local cooperation: (a) Oakley Reservoir project: agree to pay the first cost allocated to water supply, such cost being presently estimated at 15.5 percent of the total, or \$4,599,000, with such modification in these amounts as may be necessary to reflect adjustments in the storage capacity for water supply and other purposes, to be paid in a lump sum prior to construction with appropriate adjustments when actual costs are determined, or in installments prior to commencement of pertinent items, in accordance with construction schedules as required by the Chief of Engineers, or by annual payments, including interest during construction and interest on the unpaid balance, over the life of the project as determined by the Chief of Engineers, or 50 years, whichever is the lesser; agree to pay annually as they occur the costs of operation and maintenance allocated to water supply, such costs being presently estimated at 22.7 percent of the total, or \$43,000, with such modification in these amounts as may be necessary to reflect adjustments in the storage capacity for water supply and other purposes; maintain all roads and bridges in the reservoir area and over the improved channel downstream from the dam in accordance with regulations prescribed by the Secretary of the Army; hold and save the United States free from all water-rights claims resulting from construction and operation of the project, and operate the existing non-Federal dam and res-

ervoir at Lake Decatur for flood control in accordance with regulations approved by the Secretary of the Army. (b) Local protection projects: furnish without cost to the United States all lands, easements, rights-of-way, and ponding and spoil-disposal areas necessary for construction of the project; hold and save the United States free from damages due to the construction works; bear the expense of relocating and altering highways, highway bridges (except underpinning), utilities, buildings, interior drainage facilities, pipelines, and other structures, except railroad bridges and approaches; prescribe and enforce regulations satisfactory to the Secretary of the Army to prevent encroachment on the improved channels and ponding areas; and maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army.

Estimated cost (price level March 1961):

	Oakley Dam and Reservoir	Local protection projects and mouth of Sangamon River	Total
Federal.....	\$29,621,000	\$41,844,000	\$71,465,000
Non-Federal.....	(1)	4,091,000	4,091,000
Total.....	29,621,000	45,935,000	75,556,000

<sup>1</sup> \$4,599,000 to be reimbursed by local interests for water supply.

Comments of the State and Federal agencies:

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Health, Education, and Welfare: Favorable.

Department of Commerce: Favorable.

Federal Power Commission: Favorable.

State of Illinois: Favorable.

Comments of the Bureau of the Budget: No objection.

Remarks: Local interests desire flood control improvements in the basin. Considera-



tion of use of water stored in reservoirs for water supply and recreation was urged by representatives of several communities in the southern portion of the basin. The committee considers the recommended improvements justified for flood control, and that inclusion of water supply storage in the Oakley Reservoir with reimbursement for such storage to be made under the provisions of the Water Supply Act of 1958 is appropriate. Authorization of the project at this time is regarded as highly desirable.

#### REND LAKE, ILLINOIS

(H. Doc. No. 541, 87th Cong.)

Location: Southern Illinois, about 5 miles from Benton, Ill.

Authority: House Public Works Committee, July 6, 1949.

Existing project: None.

Water resources problems: (a) Flooding: Storms with heavy rainfall occur most frequently during spring and early summer. The flood of May 1961 was the largest of the six major floods which have occurred in the basin since 1915. Maximum discharge at Benton was 35,800 cubic feet per second. About 103,400 acres of bottom land along Big Muddy River below the proposed Rend Lake Dam site, at mile 103.7, are subject to flooding. The average annual damage is estimated at about \$157,000, of which \$57,000 is crop damage and \$100,000, property damage.

(b) Water supply: Municipal and industrial water is presently obtained from wells or surface impoundments. Seasonal fluctuations and extended drought periods seriously deplete water supplies. With allowances for existing water supply facilities, it is estimated that the net increase in water demand by 2010 within 25 miles of Benton will be about 40 million gallons per day.

(c) Stream pollution: It is anticipated that, under State law, municipalities will take proper measures to correct the general pollution problem for normal streamflow conditions. However, low flow augmentation is desirable during drought periods when there may be little or no flow in the river.

Recommended plan of improvement: The most feasible plan of development would consist of a rolled-earth dam on Big Muddy River at mile 103.7. The dam would be 42 feet high above the floodplain with a reinforced concrete spillway and an auxiliary earth spillway located in the east abutment. The continued length of dam and spillway would be 8,900 feet. Outlet works through the earth section of the dam would consist of two 6- by 6-foot sluices for regulation of the pool under normal operating conditions and drawdown of the pool. The reservoir would have a capacity of 302,500 acre-feet consisting of 111,500 for flood control, 109,000 for water supply, 57,000 for pollution abatement, and 25,000 for siltation. As an adjunct to the project, two small impoundments would be provided on two of the upper arms of the reservoir for wildlife conservation.

First costs: Federal, \$35,500,000.<sup>1</sup>

<sup>1</sup> \$6,031,000 to be repaid by local interests for water supply.

#### Project economics:

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization	\$838,000	\$297,000	\$1,135,000
Maintenance and operation including major replacements	79,000	9,000	88,000
Total	917,000	306,000	1,223,000
Annual benefits:			
Damages prevented			216,000
Recreation			536,000
Water supply			301,000
Area redevelopment			285,000
Pollution abatement			61,000
Fish and wildlife conservation			312,000
Added transportation costs			36,000
Total			1,675,000

Benefit-cost ratio: 1.4.

Local cooperation: (a) Hold and save the United States free from damages for any water-rights claims resulting from construction and operation of the project; (b) reimburse the United States in accordance with the Water Supply Act of 1958, as amended, the first costs and the annual operation and maintenance costs allocated to municipal and industrial water supply storage, tentatively estimated at \$6,031,000 and \$8,800, respectively, for the ultimate development.

Comments of the State and Federal agencies:

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Department of Commerce: Favorable.

Public Health Service: Favorable.

Federal Power Commission: Favorable.

State of Illinois: Favorable.

Comments of the Bureau of the Budget: No objection.

Remarks: The committee urges adoption of this worthy multiple-purpose project that would serve numerous water needs, provide flood control, and contribute to the redevelopment of the economy of the area.

#### MISSISSIPPI RIVER AT GUTTENBERG, IOWA

(H. Doc. 286, 87th Cong.)

Location: Guttenberg is in northeastern Iowa on the right bank of the Mississippi River.

Authority: Two resolutions of the House Committee on Flood Control, both adopted September 18, 1944.

Existing project: No existing Federal flood control project at Guttenberg. Lock and dam No. 10 of upper Mississippi River navigation project is at Guttenberg. Local interests have constructed some local flood protection measures.

Flood problem: Periodic high Mississippi River stages particularly in 1951 and 1952 have resulted in large expenditures for flood-fighting purposes and have caused extensive flood damages in the area.

Recommended plan of improvement: A north levee about 3,040 feet long, a south levee about 2,000 feet long, a pumping plant, and appurtenant works.

Estimated cost (price level of January 1960):

Federal.....\$729,000  
Non-Federal.....84,000

Total.....813,000

#### Project economics:

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization	\$26,800	\$4,330	\$31,130
Maintenance and operation		1,670	1,670
Total	26,800	6,000	32,800
Annual benefits: Damages prevented			38,700

Benefit-cost ratio: 1.2.

Local cooperation: Provide all lands, easements, and rights-of-way necessary for the construction of the project; hold and save the United States free from damages due to the construction works; maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; make any necessary alterations to utilities, culverts for interior drainage, roads, and highways including necessary widening of levees to provide for roadways where required, and provision of the necessary freeboard on streets and alley portions if and when needed?

HARRISONVILLE AND IVY LANDING DRAINAGE AND LEVEE DISTRICT NO. 2, ILLINOIS

(H. Doc. 542, 87th Cong.)

Location: Harrisonville and Ivy Landing Drainage and Levee District No. 2, including Moredock and Ivy Landing Drainage District No. 1, lies in the Mississippi River floodplain in Monroe County, Ill., between river miles 141 and 156 above the Ohio River.

Authority: House Public Works Committee resolution adopted June 17, 1948. Senate Public Works Committee resolution adopted July 18, 1959.

Existing project: The existing Federal project for Harrisonville and Ivy Landing Drainage and Levee District No. 2 provides for raising and enlarging 21.4 miles of riverfront and flank levee and constructing appurtenant works, including eight gravity drainage structures. Construction of the work was completed in 1957.

Flood problem: Although the menace of direct flooding from the Mississippi River has been largely eliminated by levees, there remains the problem of removing impounded interior drainage. The sources of the impounded water are precipitation on the protected low lands, accumulation of runoff from tributary hill lands, and seepages from the Mississippi River. Most of the accumulated water collects near the middle and third lower end of the district.

Recommended plan of improvement: Provide pumping plants adjacent to the gravity outlets of Maeystown Creek and Fountain Creek. The greatest excess of benefits over costs would be realized with pumping capacities of 600 and 30 cubic feet per second, respectively. Raise the grade of the levee for 1,000 feet on each side of the pumping plants to prevent possible overtopping and crevasing in the immediate vicinities.



Estimated cost (price level, July 1960):

Federal.....	\$1,112,000
Non-Federal.....	700
<b>Total.....</b>	<b>1,112,700</b>

Project economics:

	Non-Federal	Total
Annual charges:		
Interest and amortization.....		\$42,800
Maintenance, operation, and major replacement.....	\$28,800	28,800
<b>Total.....</b>	<b>28,800</b>	<b>71,600</b>
Annual benefits:		
Damages prevented.....		110,000
Increased land use.....		36,500
<b>Total.....</b>		<b>146,500</b>

Benefit-cost ratio: Maeystown Creek, 2.1; Fountain Creek, 1.7.

Local cooperation: (a) Provide without cost to the United States all lands, easements, and rights-of-way for the construction of the project; (b) hold and save the United States free from damages due to the construction works; (c) maintain and operate the project, including the pumping plants, after completion in accordance with regulations prescribed by the Secretary of the Army; and (d) prevent encroachment on improved channels and ponding areas and, if ponding areas and capacities are impaired, provide substitute storage capacity or equivalent pumping capacity promptly without cost to the United States.

Comments of the State and Federal agencies:

Department of the Interior: No objection. State of Illinois: Favorable.

Comments of the Bureau of the Budget: No objection.

Remarks: This project would provide for badly needed drainage on several thousand acres of highly productive land. The installation of pumping plants is amply justified and the requirements of local cooperation are proper. The committee urges adoption of the project.

#### COLUMBIA DRAINAGE AND LEVEE DISTRICT NO. 3, ILLINOIS

(H. Doc. No. 543, 87th Cong.)

Location: Mississippi River flood plain in Monroe County, Ill., between river miles 156 and 166 above the Ohio River.

Authority: House and Senate Public Works Committees resolutions adopted June 17, 1948, and June 18, 1957, respectively.

Existing project: The existing Federal project for Columbia Drainage and Levee District No. 3 provides for raising and enlarging 20.1 miles of river front and flank levee and constructing appurtenant works, including nine gravity-drainage structures. Construction of the work was essentially completed in 1958.

Flood problem: Although the menace of direct flooding from the Mississippi River has been largely eliminated by levees, there remains the problem of removing impounded interior drainage. The sources of the impounded water are precipitation on the protected lowlands, accumulation of runoff from tributary hill lands, and seepage from the Mississippi River. The accumulated water collects near the middle third and lower end of the district. Under ordinary circumstances, this area is drained by Franey Lake ditch, Long Slash, Dogwood Slough, and Shehan Lake ditch.

Recommended plan of improvement: The District engineer finds that the most suitable plan for reducing impoundment flooding would be to provide pumping plants adjacent to the outlets of Long Slash and

Franey Lake ditch. Drainage from Shehan Lake ditch and Dogwood Slough would be diverted to Long Slash by ditches 1,300 and 1,200 feet in length. He finds that the greatest excess of benefits over costs would be realized with pumping capacities of 200 and 30 cubic feet per second, respectively. The district engineer proposes to raise the grade of the levee by 2 feet for a distance of 1,000 feet on each side of the pumping stations to prevent possible overtopping and crevassing in the immediate vicinities. Local interests would construct onfarm drainage ditches on about 700 acres of land.

Estimated cost (price level of January 1961):

Federal.....	\$986,000
Non-Federal.....	6,000
<b>Total.....</b>	<b>992,000</b>

Project economics:

	Federal	Non-Federal	Total
Annual charges:			
Long Slash ditch:			
Interest and amortization.....	\$31,320	\$170	\$31,490
Maintenance and operation.....		7,700	7,700
Major replacement.....		1,660	1,660
Loss of productivity.....		50	50
<b>Total.....</b>	<b>31,320</b>	<b>9,580</b>	<b>40,900</b>
Franey Lake ditch:			
Interest and amortization.....	6,735	85	6,820
Maintenance and operation.....		3,900	3,900
Replacements.....		560	560
Loss of productivity.....		20	20
<b>Total.....</b>	<b>6,735</b>	<b>4,565</b>	<b>11,300</b>

	Long Slash ditch	Franey Lake ditch	Total
Annual benefits:			
Damages prevented.....	\$33,200	\$8,200	\$41,400
	19,700	7,500	27,200
<b>Total.....</b>	<b>52,900</b>	<b>15,700</b>	<b>68,600</b>

Benefit-cost ratio: Long Slash ditch, 1.3; Franey Lake ditch, 1.4.

Local cooperation: Provide without cost to the United States all lands, easements, and rights-of-way for the construction of the project; hold and save the United States free from damages due to the construction works; maintain and operate the project, including the pumping plants, after completion in accordance with regulations prescribed by the Secretary of the Army; and prevent encroachment on improved channels and ponding areas, and, if ponding areas and capacities are impaired, provide substitute storage capacity or equivalent pumping capacity promptly without cost to the United States.

Comments of the State and Federal agencies:

Department of the Interior: No objection. Department of Agriculture: Favorable.

State of Illinois: Favorable.

Comments of the Bureau of the Budget: No objection.

Remarks: This project would provide for badly needed drainage on several thousand acres of highly productive land. The installation of pumping plants is amply justified and the requirements of local cooperation are proper. The committee urges adoption of the project.

#### PRAIRIE DU PONT LEVEE AND SANITARY DISTRICT, ILLINOIS

(H. Doc. No. 540, 87th Cong.)

Location: The district lies on the left bank of the Mississippi River between miles 166 and 175 above the mouth of the Ohio River.

Authority: House Public Works Committee June 17, 1948, and August 20, 1957, Senate Public Works Committee, July 18, 1957.

Existing project: The existing Federal project for Prairie du Pont Levee and Sanitary District provides for raising and enlarging 15.2 miles of riverfront and flank levee and constructing appurtenant works, including nine gravity-drainage structures. The work was scheduled for completion in 1961. Nine main ditches and streams traverse the lowest portions of the area.

Flood problem: Substantial and repetitive damages have occurred due to blocked interior drainage when stages on the Mississippi River exceeded 15 to 30 feet on the Market Street gage at St. Louis, Mo. Drainage would be blocked at least once almost every year, varying in duration from a few days to a maximum of 147 days. The Palmer Creek drainage area, the largest in the district, is affected by a river stage of 15 feet. Old Prairie du Pont Creek (east) area is affected by a river stage of 20 feet, and the remaining areas are affected by a river stage of 30 feet. Blocked drainage occurs generally during the planting season, March through July.

Recommended plan of improvement: Provide pumping plants adjacent to the outlets of Palmer Creek, Old Prairie du Pont Creek (west), Falling Springs Ditch, and Old Prairie du Pont Creek (east). The greatest excess of benefits over costs would be realized with pumping capacities of 225, 35, 5, and 17 cubic feet per second, respectively. The district engineer proposes to raise the grade of the levee by 2 feet for a distance of 1,000 feet on each side of the pumping stations to insure against overtopping in the immediate vicinities.

Estimated cost (price level July 1961):

Federal.....	\$921,000
Non-Federal.....	4,300
<b>Total.....</b>	<b>925,300</b>

Project economics:

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	(?)	(?)	(?)
Maintenance and operations.....		\$16,800	
<b>Total.....</b>			<b>\$52,100</b>
Annual benefits:			
Damages prevented.....			157,800
Increased land use.....			53,800
<b>Total.....</b>			<b>211,600</b>

<sup>1</sup> Breakdown not available.

Benefit-cost ratio: 4.1.

Local cooperation: Provide without cost to the United States all lands, easements, and rights-of-way for the construction of the project; hold and save the United States free from damages due to the construction works; maintain and operate the project, including the pumping plants, after completion in accordance with regulations prescribed by the Secretary of the Army; and prevent encroachment on improved channels and ponding areas, and if ponding areas and capacities are impaired, provide substitute storage capacity or equivalent pumping capacity promptly without cost to the United States.

Comments of the State and Federal agencies:

Department of the Interior: No objection. State of Illinois: Favorable.

Comments of the Bureau of the Budget: No objection.

Remarks: This project would provide for badly needed drainage on several thousand acres of highly productive land. The installation of pumping plants is amply justified.



tified and the requirements of local co-operation are proper. The committee urges adoption of the project.

#### RICHLAND CREEK, ILL.

(H. Doc. No. 571, 87th Cong.)

Location: Richland Creek lies in Monroe, St. Clair, and Randolph Counties in southeastern Illinois..

Authority: Senate Public Works Committee resolutions adopted September 16, 1948, and July 18, 1957, and House Public Works Committee resolution adopted August 20, 1957.

Existing project: None.

Flood problem: The urban area of the city of Belleville has experienced floods with some loss of life. The rural area (reach 3) is mainly agricultural and, being generally flat, floods with accompanying destruction of crops.

Recommended plan of improvement: The district engineer has determined that the plan of improvement which would afford the greatest overall benefit to the Richland Creek Basin would consist of: (a) the two detention reservoirs proposed by the Soil Conservation Service; and (b) urban channel improvement of maximum capacity consistent with space limitations through Belleville, including necessary bridge modifications, and clearing, cleaning, and rectification of the existing channel in the rural reach 3 by the Corps of Engineers. These improvements would provide protection against the standard project flood in the urban reach through Belleville and against the 2-year flood in reach 3.

Estimated cost (price level of January 1961):

Federal.....	\$4,995,000
Non-Federal.....	574,000
Total.....	5,569,000

#### Project economics:

Annual charge.....	\$233,400
Annual benefits:	
Damages prevented.....	273,900
Other (enhancement).....	36,300
Total.....	310,200

Benefit-cost ratio: 1.3.

Local cooperation: (a) Provide without cost to the United States all lands, easements, and right-of-way necessary for construction of the project; (b) provide without cost to the United States all alterations of highways, highway bridges, utilities, and related facilities made necessary by construction of the project; (c) hold and save the United States free from damages due to the construction works; (d) maintain the improved channel after completion in accordance with regulations prescribed by the Secretary of the Army; (e) prevent encroachment on the improved channel; and (f) at least annually inform interests affected that the project will not provide protection in the agricultural reaches against major floods. Local interests are willing to furnish the requirements of local cooperation.

Comments of the State and Federal agencies:

Department of the Interior: No objection.  
Department of Agriculture: Favorable.  
Suggest coordination with Soil Conservation Service prior to construction.  
State of Illinois: Favorable.

Comments of the Bureau of the Budget: No objection.

Remarks: The committee notes that excellent coordination has been accomplished between the Corps of Engineers and the Soil Conservation Service in developing an overall plan of improvement for the area. The committee urges adoption of the recommended project.

#### PECATONICA RIVER, ILL. AND WIS.

(H. Doc. 539, 87th Cong.)

Location: In south central Wisconsin and north central Illinois.

Authority: Flood Control Act of 1946.

Existing project: An authorized local protection project at Freeport, Ill.

Flood problem: This basin is subject to flooding during all seasons of the year.

Recommended plan of improvement: Consists of about 6,000 feet of channel improvement, 4,500 feet of levee, 780 feet of concrete floodwall, three closure structures, a pumping plant, drainage facilities, and modification of a highway bridge.

Estimated cost (price level):

Federal.....	\$850,000
Non-Federal.....	182,000
Total.....	1,032,000

#### Project economics:

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$31,400	\$8,500	\$39,900
Maintenance and operation.....	3,200	3,200	6,400
Total.....	31,400	11,700	43,100
Annual benefits: Damages prevented.....			45,100

Benefit-cost ratio: 1.05.

Local cooperation: Provide all lands, easements, and rights-of-way, including borrow areas and spoil-disposal areas, necessary for the construction of the project; accomplish all relocations and alterations of buildings, utilities, highway bridges, roads, and other facilities necessary for construction of the project; hold and save the United States free from damages due to the construction works; maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; prevent any encroachment on the flood channels and ponding areas which would decrease the effectiveness of the flood control improvements, and if ponding areas and capacities are impaired promptly provide substitute storage capacity or equivalent pumping capacity; and at least annually notify those affected that the project will not provide complete flood protection.

Comments of the State and Federal agencies:

Department of the Interior: Favorable.  
Department of Agriculture: Favorable.  
State of Illinois: Favorable.  
State of Wisconsin: Favorable.  
Comments of Bureau of the Budget: No objection.

Remarks: The committee considers that the proposed project for Darlington is urgently needed and should be adopted at this time, although the benefit-to-cost ratio is marginal.

#### ROCK RIVER, ROCKFORD, ILL.

(S. Doc. No. 142, 87th Cong.)

Location: The city of Rockford is situated along both banks of Rock River about 17 miles south of the Illinois-Wisconsin State boundary.

Authority: Senate Public Works Committee resolution adopted March 31, 1953.

Existing project: There are no authorized Corps of Engineers flood control projects at Rockford.

Flood problem: Areas in Rockford and vicinity suffering greatest flood damages are along both the North and South Branches of Kent Creek and along Keith Creek within the city. Since early 1926, about nine major floods have occurred in the Rockford area.

Recommended plan of improvement: Consist of channel enlargement and realignment,

levees, and appurtenant works on the North Branch Kent Creek and in the portion of Kent Creek below the confluence of the North and South Branches; a relief channel to divert a portion of the flood flows of the South Branch Kent Creek to Rock River, and channel improvements on South Branch downstream from the point of diversion.

Estimated cost: (price level of 1960):

Federal.....	\$7,228,000
Non-Federal.....	1,068,000
Total.....	8,296,000

#### Project economics:

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$263,200	\$300	\$263,500
Maintenance and operation.....	49,700	11,300	61,000
Loss of productivity.....		6,200	6,200
Total.....	312,900	17,800	330,700
Annual benefits: Damages prevented.....			683,500

Benefit-cost ratio: 2.1.

Local cooperation: Provide without cost to the United States all lands, easements, rights-of-way, and spoil-disposal areas necessary for construction of the project; hold and save the United States free from damages due to the construction works; bear the costs of all relocation and alterations of bridges, buildings, structures, sewers, utilities, and other improvements, except railroad bridges and approaches, made necessary by construction of the project; maintain the works after completion in accordance with regulations prescribed by the Secretary of the Army; and prescribe and enforce regulations to prevent encroachments on the improved channels and on ponding areas.

Comments of the State and Federal agencies:

Department of the Interior: Favorable.  
Department of Commerce: Favorable.  
State of Illinois: Favorable.  
Comments of the Bureau of the Budget: No objection.

Remarks: Since early 1926, about nine major floods have occurred in the Rockford area. The most recent major damaging flood in the area occurred in July 1952 when at least 1,000 persons evacuated their residences for several days. A recurrence of the July 1952 flood under present conditions would cause damages estimated at \$2,260,000 in the Kent Creek Basin. The benefits amply justify the project at Rockford.

#### MISSISSIPPI RIVER, URBAN AREAS FROM HAMP- TON, ILL., TO MILE 300

(H. Doc. No. 564, 87th Cong.)

Location: The reach of the Mississippi River under consideration is that between river miles 300 and 492 in Illinois, Missouri, and Iowa.

Authority: Two resolutions by House Committee on Flood Control, both adopted September 18, 1944.

Existing project: The Corps of Engineers projects pertinent to this study are the Coralville Reservoir on the Iowa River (in operation), the Red Rock Reservoir in Des Moines River (under construction), the Saylorville Reservoir on Des Moines River (in the planning stage), and several local protection projects for urban and rural areas.

Flood problem: Recent floods occurred in 1951, 1952, and 1960, with maximum flows of 225,000 cubic feet per second at Clinton, about 290,000 cubic feet per second at Keokuk, and 324,000 cubic feet per second at Hannibal. Floods are of comparatively long duration, and causes extensive damage.



Flooding in the reach occurs on the average of once every 2 years.

**Recommended plan of improvement:** Improvements for flood control along the Mississippi River at Rock Island, Ill.; Hannibal, Mo.; and Gregory Drainage District, Mo.; consisting of levees, floodwalls, gated drainage structures, pumping plant, railroad adjustments and appurtenant works. Any one of the three units may be undertaken independently of the others.

Estimated cost (May 1961 price level):

Federal.....<sup>1</sup> \$9,289,000  
Non-Federal..... 634,000

Total..... 9,923,000

<sup>1</sup> \$3,850,000 for Rock Island, \$4,394,000 for Hannibal, and \$1,045,000 for Gregory Drainage District.

#### Project economics:

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$344,500	\$30,700	\$375,200
Maintenance and operation.....		50,900	50,900
Total.....	344,500	81,600	426,100
Annual benefits: Flood damages prevented.....		577,300	

Benefit-cost ratio: 1.3 (Rock Island, 1.4; Gregory Drainage District, 2.0; and Hannibal, 1.2).

**Local cooperation:** Provide all lands, easements, and rights-of-way; modify or relocate facilities, except railroads; hold and save the United States free from damages; maintain and operate the completed works; and at Hannibal, prevent encroachment on the ponding area adjacent to the pumping station. Local interests will provide the required cooperation.

**Comments of the State and Federal agencies:**

Department of the Interior: Favorable.  
Department of Agriculture: Favorable.  
State of Missouri: Favorable.  
State of Iowa: Favorable.  
State of Illinois: Favorable.

Comments of the Bureau of the Budget: No objection.

**Remarks:** The committee notes that improvements for flood control along the Mississippi River at Rock Island, Ill., Hannibal, Mo., and Gregory Drainage District, Mo., are amply justified.

MISSISSIPPI RIVER URBAN AREAS FROM HAMPTON, ILL., TO CASSVILLE, WIS.

(H. Doc. 450, 87th Cong.)

**Location:** The reach of the Mississippi River from Hampton, Ill., mile 491.8, to the vicinity of Cassville, Wis., mile 606.7, above the mouth of the Ohio River.

**Authority:** This interim report is in partial response to two resolutions adopted September 18, 1944, by the Committee on Flood Control of the House of Representatives.

**Existing project:** The only existing Corps of Engineers local flood control project in this reach is a levee with appurtenant works to protect the town of Sabula, Iowa. Construction was completed in November 1957, at a Federal cost of \$411,915.

**Flood problem:** The flood plain in the reach of the Mississippi River considered in this report contains 17 urban areas. The problem is the reoccurring flood damage in these urban areas. Ten major floods of record occurred during the period 1880 to 1954. Average annual flood damages under present conditions of development at the communities investigated are estimated at \$1,336,800, of which 90 percent are at Dubuque and Clinton.

**Recommended plan of improvement:** The plan provides for improvements for flood control at Dubuque, Iowa, consisting of levees, floodwalls, and appurtenant works, including a navigation opening at the mouth of Dubuque Harbor.

Estimated cost (price level, July 1959):

Federal..... \$5,350,000  
Non-Federal..... 150,000

Total..... 5,500,000

#### Project economics:

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$200,900	\$7,350	\$208,250
Maintenance and operation.....		12,750	12,750
Total.....	200,900	20,100	221,000
Annual benefits: Damages prevented.....			291,400

Benefit-cost ratio: 1.3.

**Local cooperation:** Provide without cost to the United States all lands, easements, and rights-of-way necessary for the construction of the project; hold and save the United States free from damages due to the construction works; maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army; modify or relocate buildings, utilities, sewers, and other facilities where necessary in the construction of the project, including necessary widening of levees to provide for roadways; and obtain legal control over pondage areas and prevent encroachment until substitute pondage or increased pumping capacity has been provided at local expense. Officials of the city of Dubuque have indicated their willingness to comply with the items of local cooperation.

**Comments of the State and Federal agencies:**

State of Illinois: Favorable.

State of Iowa: Favorable.

Department of the Interior: Favorable.

Department of Agriculture: Favorable.

Comments of the Bureau of the Budget: No objection.

**Remarks:** The committee notes that the proposed improvements for flood control at Dubuque, Iowa, are economically justified and urgently needed.

**Mr. DIRKSEN.** Mr. President, Illinois is uniquely situated in this respect. The State operates with and out of five different and distinct district offices of the U.S. Corps of Engineers. Three of the offices are located within Illinois; one is located at St. Louis; and one is located at Louisville.

A variety of projects has been developed because of the Wabash River boundary on the Indiana side; the Mississippi River boundary on the west; the Great Lakes and all the harbor improvements that go along with them; the turning basins and harbors which are now a part of the commercial structure of the city of Chicago; and the fact that the Ohio River washes the toe of the State. Then there is the crisscrossing of the rivers in great variety, some of which have been improved, and on which a large amount of waterborne commerce has developed.

In addition, there are rivers within the State which are in process of improvement, and which will also generate large quantities of commerce in due time.

We have worked extensively over a period of years on those projects, including those in the Wabash Basin.

I wish to take time now to pay tribute to one of the members of my staff, Mr. William Stevens, who has done very thorough work and has constantly pursued these projects, whatever their character might be. He has performed his work magnificently and has exercised care, diligence, and caution to make certain that all figures were correct, that the authority always existed; that if it did not exist, it was provided; and that where there were lapses or where funds were appropriated and authority did not exist, that difficulty or that hiatus was properly remedied. So while he is in the Chamber, I wish to pay tribute to him, because he has performed a great labor in behalf of all the people in every section of the State of Illinois.

**Mr. MANSFIELD.** Mr. President, I wish to propound a unanimous-consent request, which I think has been cleared with all Senators concerned.

I ask unanimous consent that on the two amendments to be offered by the junior Senator from Delaware [Mr. Boggs] 30 minutes be allotted to each, 15 minutes to a side and that on all other amendments, 20 minutes be allotted to each, 10 minutes to a side.

**Mr. BOGGS.** Mr. President, perhaps I misunderstood the distinguished majority leader. I understood there would be 30 minutes to a side.

**Mr. MANSFIELD.** Very well; that is all right.

**Mr. BOGGS.** Speaking for myself, I have no objection to 30 minutes to a side.

**Mr. MANSFIELD.** As to the other amendments, I ask unanimous consent that 10 minutes be allotted to each, 5 minutes to a side. I understand there are only two or three other amendments.

The **PRESIDING OFFICER** (Mr. PROXMIRE in the chair). Does the majority leader ask that the time on the Boggs amendments be limited to 1 hour, 30 minutes to a side; and that on all other amendments the time be limited to 10 minutes each, 5 minutes to a side?

**Mr. MANSFIELD.** That is correct.

**Mr. JAVITS.** Mr. President, reserving the right to object—and I shall not object—will the Senator from Montana permit me to have 1 minute on his time limitation to make a brief statement on the bill?

**Mr. MANSFIELD.** First, I should like to have the proposal agreed to; then the Senator from New York may make his statement.

The **PRESIDING OFFICER.** Is there objection to the unanimous-consent request of the Senator from Montana? The Chair hears none, and it is so ordered.

**Mr. JAVITS.** Mr. President, in March of this year I introduced S. 3072, to seek additional authorization for the Great Lakes-Hudson River Waterway, which is known to us in New York as the Barge Canal, on which the State of New York has expended considerable sums of money for the improvement of navigation.

I am gratified to know that an authorization of \$1 million is provided in the bill.



I express my appreciation to the Senator from Oklahoma [Mr. KERR] and to the committee, on behalf of my colleague from New York [Mr. KEATING] and myself, for accommodating this project in the bill. It is an extremely important and worthwhile project for the commerce of New York and for the commerce of the Nation, as well. The people of the State of New York will be encouraged by this authorization.

The PRESIDING OFFICER. Under the unanimous-consent request, the Senator from Delaware is recognized.

Mr. MORSE. Mr. President, will the Senator from Delaware yield 1 minute to me?

Mr. BOGGS. Mr. President, I have no objection to the request of the Senator from Oregon if the time consumed by him is not charged to my time.

Mr. KERR. Mr. President, I will yield to the Senator from Oregon on my time.

Mr. MORSE. Mr. President, I wish to say to the Senator from Oklahoma that the people of my State are sincerely grateful for the fair consideration they have received from the committee with respect to projects for Oregon. It was my privilege to present, with my able colleague, Mrs. NEUBER-

GER, the case for the State of Oregon with respect to a series of these projects, such as the 40-foot channel in the Columbia River; the Rogue River Basin; the Columbia River Basin; and other projects which are included in the report.

I ask unanimous consent to have printed at this point in the RECORD a data sheet on the Rogue River project as well as a brief summary of it and other Oregon projects, as contained in the committee report.

There being no objection, the data sheet and summaries were ordered to be printed in the RECORD, as follows:

#### ROGUE BASIN PROJECT DATA SHEET

General purpose: Rogue River Basin is nationally known for its fishery, scenic, and recreation resources. Lumbering, agriculture, and recreation are its principal industries. The basin has numerous natural resources; a rapidly growing population, and a great potential for development. The water resource needs of the basin include flood control, irrigation, water supply, fish and wildlife enhancement, water quality control, electric power generation, and provision for increased recreational use. The purpose of the project is to solve these needs. The plan is multipurpose, comprehensive, and adaptable to continued development.

Principal structures	Location	Height (feet)	Total capacity (acre-feet)	Purpose
Lost Creek.....	Rogue River.....	360	465,000	Flood control, irrigation, water supply, fish enhancement, wildlife enhancement, water quality control, power, and recreation.
Elk Creek.....	Elk Creek.....	235	101,000	Flood control, irrigation, water supply, fish enhancement, wildlife enhancement, water quality control, and recreation.
Applegate.....	Applegate River..	230	72,000	Flood control, irrigation, fish enhancement, wildlife enhancement, water quality control, and recreation.

Benefits	Annual benefits	Per cent	Comments
Flood control.....	\$1,360,000	22	Flood control benefits are the difference between average annual flood damages which could be expected with and without the project.
Irrigation.....	925,000	15	Area is adapted to specialty crops (pears, seeds, berries). Irrigation will not increase surplus crops.
Water supply.....	322,700	5	Basin communities are concerned about future municipal water supplies.
Fish and wildlife.....	1,130,200	18	Rogue spawns significant anadromous fishery; harvested from California to Alaska. Project will also enhance the famous sports fishery.
Power.....	1,881,700	31	Power could be marketed in southern Oregon—a growing area—or used on any Columbia-California Intertie to firm up line losses.
Recreation.....	528,000	9	Basin is a recreation area of renown, attracting visitors nationally, but short on lake type of recreation.

Economic justification (100-year basis): Lost Creek-Elk Creek: Benefit-cost ratio, 1.51 to 1; Applegate: Benefit-cost ratio, 1.54 to 1.

#### Endorsements:

State of Oregon: Governor, water resources board, game commission, fish commission, natural resources commission.

Counties in basin: Jackson County court, Josephine County court, Curry County court.

Cities in basin: Medford, Grants Pass, Rogue River, Gold Hill, particularly water supply.

Conservation groups: Izaak Walton League (National, State, Jackson County, and Josephine County), Oregon Wildlife Federation, Rogue Rod & Gun Club, Salmon Unlimited.

Agricultural groups: Jackson and Josephine Pomona Granges, Jackson and Josephine County Farm Bureaus, Medford Irrigation District, Rogue River Valley Irrigation District, Eagle Point Irrigation District, Sams Valley-Beagle Water Development Association, Rogue Basin Flood Control and Water Resources Association—over 80 member organizations.

#### COLUMBIA AND LOWER WILLAMETTE RIVERS, OREG. AND WASH.

(H. Doc. 203, 87th Cong.)

Location: The Columbia River rises in British Columbia, enters the United States in northeastern Washington, flows southerly to its confluence with the Snake River, thence westerly along the Oregon-Washington boundary to the Pacific Ocean. The reach of the Columbia River under consideration in this report extends from the mouth of the Willamette River upstream

4.5 miles to Vancouver, Wash., 106 river miles from the sea.

Authority: Resolutions by the Senate and House Public Works Committees adopted March 14, 1957, and April 9, 1957, respectively.

Existing project: Provides for a channel 35 feet deep and 500 feet wide from the mouth of Columbia River to Portland, Ore. a distance of 113 miles; and a channel 30 feet deep and 300 feet wide from the mouth of Willamette River to Vancouver, Wash., a dis-

tance of 5 miles, with two turning basins 30 feet deep and 800 feet wide, and approximately 2,000 and 3,000 feet long for the upper and lower basins, respectively. The project has been completed.

Navigation problem: Inadequate channel depth and width for vessels now using the waterway between the mouth of Willamette River and Vancouver. Groundings and damage to ships have been prevented by light loading and, during low river stages, running the tides.

Recommended plan of improvement: Provides for a channel in the Columbia River 35 feet deep and 500 feet wide from the mouth of the Willamette River to the Interstate Bridge at Vancouver, Wash., with two turning basins 35 feet deep, 800 feet wide, and 2,000 and 5,000 feet long for the upper and lower basins, respectively.

Estimated cost (fourth quarter price level of 1959):

Federal..... \$492,500  
Non-Federal..... 17,900

Total..... 510,400

#### Project economics:

	Federal	Non-Federal	Total
Annual charges:			
Interest and amortization.....	\$17,660	\$840	\$18,500
Maintenance.....	48,000	0	48,000
Total.....	65,660	840	66,500
Annual benefits:			
Transportation savings.....			159,770
Land enhancement.....			12,000
Total.....			171,770

Benefit-cost ratio: 2.6.

Local cooperation: Contribute in cash 3.5 percent of the construction cost, presently estimated at \$17,900 in a lump sum prior to construction; provide all lands, easements, and rights-of-way including spoil disposal areas; provide and maintain depths in berthing areas and local access channels commensurate with project depths; hold and save the United States free from damages; provide and maintain public terminal facilities open to all on equal terms. Local interests have indicated willingness to meet requirements of local cooperation.

Comments of the State and Federal agencies:

Department of the Interior: Favorable.

State of Washington: Favorable.

State of Oregon: Favorable.

Comments of the Bureau of the Budget: No objection.

Remarks: Lack of depth in the presently authorized channel requires partial loading of the larger ships and causes delays to many ships in waiting for a high tide to navigate the channel. The proposed improvement will minimize delays, permit full loading of ships, and reduce present hazards to vessels. The committee considers the project to be well justified and the local contribution to be appropriate in view of the enhanced land values resulting from deposition of spoil.

#### COLUMBIA AND LOWER WILLAMETTE RIVERS, BELOW VANCOUVER, WASH., AND PORTLAND, OREG.

(H. Doc. 452, 87th Cong.)

Location: The Columbia River rises in British Columbia, enters the United States in northeastern Washington, flows southerly to its confluence with the Snake River, thence westerly along the Oregon-Washington boundary to the Pacific Ocean.

Authority: Resolutions by the Committee on Public Works of the U.S. Senate and House of Representatives adopted March 14, 1957, and April 9, 1957, respectively.



**Existing project:** The existing project for the Columbia and lower Willamette Rivers provides for a channel 35 feet deep and 500 feet wide in the Columbia River from about river mile 3 to the mouth of Willamette River, mile 101.5, thence 30 feet deep and 300 feet wide to Vancouver, river mile 106.5; upper and lower turning basins at Vancouver; a channel in the Willamette River 35 feet deep from the mouth to Portland, a distance of about 11.6 miles; numerous side channels and connecting waterways; a small-boat mooring basin at Astoria; and construction of stone and pile dikes and revetments. Local interests have provided channel improvements and maintenance in addition to port facilities. Several power and navigation dams upstream from Vancouver have been built by the Federal Government. Others, either under construction or authorized, will provide slackwater navigation on the Columbia River to Pasco-Kennebec, Wash., river mile 329, and on the Snake River to Lewiston, Idaho, river mile 140.

**Navigation problem:** With the present trend to use of larger ships, increased operating costs will be incurred through delays, light loading, and possible ship damage. The existing project dimensions restrict the use of larger ships and eventually will limit the commerce carried by the waterway.

**Recommended plan of improvement:** (a) A channel 40 feet deep and 600 feet wide from Vancouver, Wash., river mile 105.5, to the mouth of Columbia River, river mile 3; (b) a turning basin at Vancouver, Wash., 40 feet deep, 800 feet wide, and about 5,000 feet long; (c) a turning basin at Longview, Wash., 40 feet deep, average width of 1,200 feet, and about 6,000 feet long; and (d) a channel 40 feet deep in Willamette River with varying widths of 600 to 1,900 feet, from the mouth, river mile 0, to Broadway Bridge, river mile 11.6, which encompasses the Portland Harbor area; with the provision that accomplishments of that portion of the plan contained in items (a) and (b) be contingent upon accomplishment of improvements in these areas recommended in interim report on Columbia River dated March 31, 1961.

**Estimated cost (1961 price level):**

Federal.....	\$20,100,000
Non-Federal.....	1419,000
<b>Total.....</b>	<b>20,519,000</b>

<sup>1</sup> Cash contribution.

**Project economics:**

	Federal	Non-Federal	Total
<b>Annual charges:</b>			
Interest and amortization.....	\$733,000	\$23,000	\$756,000
Maintenance and operation.....	775,000	-----	775,000
<b>Total.....</b>	<b>1,508,000</b>	<b>23,000</b>	<b>1,531,000</b>
<b>Annual benefits:</b>			
Elimination of delays.....	-----	-----	2,322,000
Elimination of groundings.....	-----	-----	7,800
Delays in entrance.....	-----	-----	-99,400
Land enhancement.....	-----	-----	84,800
<b>Total.....</b>	-----	-----	<b>2,314,200</b>

**Benefit-cost ratio: 1.5.**

**Local cooperation:** Provide all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of aids to navigation; hold and save the United States free from damages; provide and maintain at local expense adequate public terminal and transfer facilities; accomplish such alterations as are required in utility facilities; assist in the work of improving and maintaining the main ship channel in Columbia and Willamette Rivers;

provide and maintain depths in berthing areas and local access channels serving the terminals commensurate with the depths provided in the related project areas; and contribute in cash 1.8 percent of the cost of construction by the Corps of Engineers. Local interests have indicated willingness to provide required cooperation.

**Comments of the State and Federal agencies:**

Department of the Interior: Favorable.  
Department of Agriculture: Favorable.  
Department of Commerce: Favorable.  
State of Washington: Favorable.  
State of Oregon: Favorable.

**Comments of the Bureau of the Budget:**  
No objection.

**Remarks:** The committee recognizes that, with the present channels and the trend to use of larger ships, increased operating costs will be incurred through delays, light loading, and possible ship damage. Also, that the existing dimensions will restrict the use of larger ships and eventually limit the commerce carried by the waterway. Improvement is desirable. In view of the land enhancement from use of spoil to fill low areas to a flood-free level, the proposed local contribution is considered appropriate.

ROGUE RIVER BASIN, OREG. AND CALIF.

(H. Doc. No. 566, 87th Cong.)

**Location:** Rogue River Basin is located in southwestern Oregon and northern California with Oregon containing about 97 percent of the basin area.

**Authority:** Public Law 183 approved July 1, 1935, and Flood Control Acts of 1936 and 1958.

**Existing project:** The corps has provided 7 minor local protection works under emergency and continuing authorities at total cost of \$316,000. Navigation project now under construction at mouth of river will provide 13-foot project and cost \$3.5 million. Bureau of Reclamation has constructed 16,000 kilowatt powerplant on tributary. Local interests have irrigation facilities for about 72,000 acres. Of 9 organized districts serving 42,000 acres, 3 have storage facilities. There is a small reservoir for water supply and 8 private hydroelectric plants with a total capacity of about 56,000 kilowatts.

**Flood problem:** Flood damages occur in the Rogue River Basin in a number of discontinuous areas along the main stream and its principal tributaries. The most recent major flood occurred in 1955 and inundated more than 13,000 acres of land.

**Recommended plan of improvement:** Three multiple-purpose reservoirs. A rock and gravel embankment dam at Lost Creek site, 360 feet high with usable storage capacity of 315,000 acre-feet. A rock and gravel embankment dam at Elk Creek site, 235 feet high with usable storage capacity of 95,000 acre-feet. An earth and gravel embankment dam at the Applegate River site, 230 feet high with usable storage capacity of 65,000 acre-feet.

**Estimated cost—(all Federal, July 1961 price level):**

Lost Creek Dam.....	\$74,500,000
Elk Creek Dam.....	17,500,000
Applegate Dam.....	14,700,000
<b>Total.....</b>	<b>106,700,000</b>

<sup>1</sup> Of this amount, \$5,977,000 and \$16,592,000 will be repaid by local interests for water supply and irrigation, respectively.

**Project economics:**

<b>Annual charges:</b>	
Interest and amortization.....	\$3,191,000
Operation, maintenance, and replacement.....	802,400
Taxes foregone and economic cost.....	78,800
<b>Total.....</b>	<b>4,072,200</b>

**Annual benefits:**

Flood control.....	\$1,360,000
Irrigation.....	925,000
Water supply.....	322,700
Fish and wildlife.....	1,130,200
Power.....	1,881,700
Recreation.....	528,000

**Total.....** 6,147,600

**Benefit-cost ratio: 1.5.**

**Local cooperation:** Prior to construction, they will agree to reimburse the United States for first costs and annual operation, maintenance, and replacement costs allocated to municipal and industrial water supply storage, presently estimated at \$5,977,000 and \$24,900, respectively; the Secretary of the Interior make necessary arrangements for repayment of that part of the construction cost and annual operation, maintenance, and replacement costs allocated to irrigation, presently estimated at \$13,007,000 and \$66,500, respectively, for the Lost Creek-Elk Creek Reservoirs and \$3,585,000 and \$9,900, respectively, for the Applegate Reservoir; and the State of Oregon take necessary action to insure maintenance, in the streams, of flows to be released for benefit of the fishery. Local interests have indicated willingness to cooperate.

**Remarks:** The committee recognizes the need for comprehensive development of the water resources of the Rogue River Basin for flood control, irrigation, water supply, fish and wildlife enhancement, recreation, and power. The committee concurs in the construction, operation, and maintenance of the proposed improvements by the Corps of Engineers to serve these purposes. The committee considers it desirable that the authorizing legislation clearly indicate that the project is to be located, constructed, and operated to accomplish the benefits as set forth and described in the report and appendixes, and that in the years of short water supply all users will share the available water in the same proportions that they would share the total full supply when it is available, and that no further water-use allocations will be made from the authorized storage so as to retain the maximum possible benefits to authorized uses during the periods of adversity when storage shortages occur.

COLUMBIA RIVER AND TRIBUTARIES, WASHINGTON, OREGON, IDAHO, MONTANA, WYOMING, NEVADA, AND UTAH

(H. Doc. 403, 87th Cong.)

**Location:** The Columbia River Basin is located in the Northwest portion of continental United States and includes most of the States of Washington, Oregon, and Idaho, western Montana and small areas in Wyoming, Nevada, and Utah. The basin also includes the southeastern drainage of the Province of British Columbia, Canada.

**Authority:** Resolution, Senate Committee on Public Works, adopted July 28, 1955 and other resolutions.

**Existing project:** A total of 10½ million acre-feet of storage, sufficient to control major floods to 1,030,000 cubic feet per second is presently available at Federal and non-Federal projects existing or under construction. A navigable channel 9 feet deep and 250 feet wide is authorized on the main stem to the head of McNary pool (mile 352) and on Snake River to mile 10.0. Existing, under construction, and authorized Federal projects have an aggregate installed hydroelectric capacity of 9,400,000 kilowatts.

**Flood problem:** The area of major flood damage lies along the 140-mile reach of Columbia River below Bonneville Dam. About 60 percent of the flood plain is protected to some degree by levees or other protective works but almost none of these improvements provide adequate protection against larger floods. Without levees or



storage, the average annual flood damages along the lower Columbia River would be \$38,800,000. Existing levees reduce this by \$13,600,000 annually and authorized levee improvements when completed would further reduce this damage by \$700,000 leaving a residual damage of \$24 million which is subject to only limited reduction by existing storage.

Recommended plan of improvement: The plan of improvement provides for the construction of 12 projects, including dams, reservoirs, and related works, capable of effecting, in combination with existing and reasonable assured storage in the United States and Canadian portions of the basin, control of the 1894 flood to 600,000 cubic feet per second. These recommended proj-

ects would provide substantial hydroelectric power, navigation, recreation, fish and wildlife, as well as other benefits. The reporting officers also recommend that the depth and width of the authorized channel in the Columbia-Snake barge navigation project be established as 14 and 250 feet, respectively, at minimum regulated flow.

*Estimated costs (1957 price levels)*

Project	Location	Construction cost <sup>1</sup>	Annual operation and maintenance
Flathead Lake outlet improvement <sup>2</sup>	Flathead River, Mont.	\$6,142,000	\$13,000
Knowles <sup>2</sup>	do	234,910,000	725,000
High Mountain Sheep <sup>2</sup>	S Snake River, Idaho and Oreg.	<sup>3</sup> 198,083,000	<sup>3</sup> 2,230,000
China Gardens	do	62,220,000	704,000
Asotin	do	<sup>4</sup> 83,340,000	832,000
Penny Cliffs <sup>2</sup>	Middle Fork, Clearwater River, Idaho	210,036,000	758,000
Bruces Eddy	North Fork, Clearwater River, Idaho	<sup>5</sup> 127,166,000	650,000
Garden Valley division <sup>2</sup>	Payette River, Idaho	146,100,000	1,150,000
Strube reregulating reservoir	South Fork, McKenzie River, Oreg.	6,685,000	32,400
Gate Creek	Gate Creek, Oreg.	15,920,000	91,200
Fern Ridge (modification of existing project)	Long Tom River, Oreg.	140,000	0
Cascadia	South Santiam River, Oreg.	28,270,000	109,000
Total		1,119,012,000	7,294,600

<sup>1</sup> Exclusive of costs of preauthorization studies.

<sup>2</sup> See comments of the Bureau of the Budget.

<sup>3</sup> Estimates based on pool elevation of 1,510 feet above mean sea level, and the construction of an arch dam rather than a concrete gravity dam, which was estimated to cost \$241,782,000 in the report of the Board of Engineers for Rivers and Harbors.

<sup>4</sup> For power only, but with provisions for future navigation lock.

<sup>5</sup> Planning studies, incomplete at this time, indicate a concrete gravity dam of somewhat higher elevation than assumed in the division engineer's report, will be found economically justified.

<sup>6</sup> As planned and proposed by Bureau of Reclamation with 50-year period of analysis.

*Project economics (with Canadian storage and 50-year life)*

Project	Annual benefits (thousands)				Annual charges (thousands)				Benefit-cost ratio
	Flood control	Power	Other	Total	Interest and amortization	Operation, maintenance and repair	Other <sup>1</sup>	Total	
Flathead Lake outlet improvements	\$147.0	\$114		\$261.0	\$223	\$13		\$236	1.11
Knowles	447.0	11,211	\$58	11,716.0	9,116	725	\$980	10,821	1.08
High Mountain Sheep	239.0	27,454	16	27,709.0	7,510	2,230	2,400	12,140	2.28
China Garden		5,802	13	5,815	2,317	704	507	3,528	1.65
Asotin (without lock)		9,599	32	9,631.0	3,085	832	839	4,756	2.03
Penny Cliffs	911.0	9,976	282	11,169.0	7,872	758	872	9,502	1.18
Bruces Eddy	552.0	7,646	553	8,751.0	4,769	660	668	6,087	1.44
Garden Valley division	143.0	9,236	-34	9,345.0	5,409	1,150		6,559	1.43
Strube reregulating reservoir <sup>2</sup>		674		674.0	441	41	101	583	1.11
Gate Creek	715.0	11	<sup>3</sup> 161	887.0	586	91	1	678	1.31
Fern Ridge	13.8			13.8	5			5	2.76
Cascadia	1,084.0	4	<sup>4</sup> 445	1,533.0	1,051	109	12	1,172	1.31

<sup>1</sup> Includes taxes, production and harvesting costs on national forest land, and others.

<sup>2</sup> Benefits and charges are incremental amounts associated with Strube and peaking installation at Cougar compared to initial high load factor installation at Cougar. For

Strube only, the annual costs are: Interest and amortization, \$242,000; operation, maintenance and repair, \$32,000; and other, \$26,000.

<sup>3</sup> Includes \$122,500 irrigation benefits and \$26,900 pollution abatement benefits.

<sup>4</sup> Includes \$313,400 irrigation benefits and \$69,800 pollution abatement benefits.

Local cooperation: No local cooperation is required.

Remarks: The committee recognizes the importance of continued and timely development of the water resources of the Columbia and proposes authorization of the following projects for further Federal developments consistent with provisions of the Interior-Army agreement of March 16, 1962: Knowles Dam (for construction by Bureau of Reclamation), China Gardens Dam, Asotin Dam, Bruces Eddy Dam, Strube reregulating dam, Gate Creek Dam, Fern Ridge Dam modification, and Cascadia Dam.

The committee has recommended the several projects on the Columbia River Basin as recommended by the Chief of Engineers in House Document No. 403. The committee is of the opinion that it would be appropriate that the Knowles Dam and Reservoir, Flathead River, Mont., be constructed, operated, and maintained by the Bureau of Reclamation, Department of the Interior.

Mr. MORSE. Mr. President, I deeply appreciate the fair consideration which was given to my State, as is shown by the recommendation of the Committee on Public Works, headed by the distinguished Senator from New Mexico who is

ably represented at this moment by the distinguished Senator from Oklahoma.

These projects, when completed, will amply repay the public investment in them. They constitute, in material form, an evidence of prudent foresight for which our descendants should be thankful.

I commend the committee and its able chairman for their work on this bill. I wish also to compliment the committee upon the dedicated staff which serves it, and particularly Mr. Theodore W. Sneed and Mr. John L. Mutz, both of whom have, with unfailing courtesy, provided my office with much technical advice and assistance promptly and efficiently.

Mr. TALMADGE. Mr. President, will the Senator from Delaware yield me 1 minute?

Mr. BOGGS. Mr. President, I shall be glad to yield to the Senator from Georgia, provided the minute to be used by him is not charged to my time.

Mr. KERR. Mr. President, I yield 1 minute to the Senator from Georgia from my time.

Mr. TALMADGE. Mr. President, I desire to pay tribute to the distinguished senior Senator from Oklahoma for the able manner in which he has presented the bill. I desire also to express to him the deep appreciation of the junior Senator from Georgia for the manner in which he handled the projects which have so long needed development.

Mr. President, I ask unanimous consent to have printed at this point in the RECORD a letter from Maj. Gen. R. G. MacDonnell, director of civil works, dated June 8, 1962, relating to the development of the Flint River Basin; and also a report from the Chief of Engineers dated May 4, 1962, relating to the development of the Flint River Basin.

There being no objection, the letter and the report were ordered to be printed in the RECORD, as follows:

HEADQUARTERS,  
DEPARTMENT OF THE ARMY,  
OFFICE OF THE CHIEF OF ENGINEERS,  
Washington, D.C., June 8, 1962.

HON. HERMAN E. TALMADGE,  
U.S. Senate.

DEAR SENATOR TALMADGE: There is furnished for your information a copy of the



proposed report of the Chief of Engineers, together with a copy of the report of the Board of Engineers for Rivers and Harbors, on a review of the report on and a survey of the Flint River, Ga.

The proposed report of the Chief of Engineers concurs in the finding of the Board of Engineers for Rivers and Harbors. As stated therein, the recommendation approves a comprehensive plan of five projects and authorization of the three upstream multiple-purpose dams and reservoirs as the first phase in providing the plan. It is noted that a substantial growth in the economy and waterborne transportation needs of the area, requiring almost two decades to attain, would be necessary to justify the two lower river projects to extend navigation. Accordingly, recommendation of these latter projects for authorization appears premature at this time. Reexamination of these two projects could be made under the survey report procedure, if requested, when construction of other units in the overall comprehensive basin plan has been well advanced and the need for the second phase becomes more imminent.

This report is now being furnished the Assistant Attorney General, Executive Department, State Capitol, Atlanta, Ga., the Director, Department of Water Resources, State Department of Conservation, Tallahassee, Fla., and the Secretary of the Interior, for review and comment, in accordance with existing law, prior to transmission of the report to Congress. Copies of the report are being furnished other interested Federal agencies for review and comment also.

Sincerely yours,

R. G. MACDONNELL,  
Major General, U.S. Army,  
Director of Civil Works.

HEADQUARTERS, DEPARTMENT

OF THE ARMY,

OFFICE OF THE CHIEF OF ENGINEERS,

Washington, D.C.

Subject: Flint River, Ga.

To: The Secretary of the Army.

1. I submit for transmission to Congress the report of the Board of Engineers for Rivers and Harbors concerning Flint River, Ga., accompanied by reports of the district and division engineers, in response to a resolution of the Committee on Public Works of the U.S. Senate adopted June 1, 1948, and to an item in section 7 of the River and Harbor Act approved July 24, 1946.

2. The district and division engineers find that the Spewrell Bluff, Lazer Creek, and Lower Auchumpkee Creek Dams and Reservoirs, in the headwaters, for flood control, hydroelectric power generation, general recreation and fishing recreation, and the Raccoon Creek and Lower Vada projects for navigation below Albany, Ga., general and fish and wildlife recreation and, in the case of the Lower Vada project, hydroelectric power generation, would provide the best development for the Flint River. They recommend the undertaking of these projects on a sequential basis in two phases at an estimated Federal cost of \$216,985,000 for construction and \$1,143,000 annually for operation and maintenance. The estimated additional average annual Federal cost for major replacements is \$605,000. The total annual benefits and economic costs for the proposed sequential development based on a 100-year analysis period are \$12,678,000 and \$10,784,000, respectively, including benefits and costs related to recreational development to be undertaken by local interests. The annual benefits and economic costs for the upstream multiple-purpose reservoirs would

total \$9,491,000 and \$7,844,000, respectively; the resulting benefit-cost ratio is 1.2. The total annual benefits and economic costs for the lower projects are \$3,187,000 and \$2,940,000, respectively, based on completion in 1980; the resulting benefit-cost ratio is 1.1. The corresponding figures for the lower projects based on completion in 1970 are \$2,387,000 and \$2,940,000, respectively; the resulting benefit-cost ratio is 0.8.

3. The Board of Engineers for Rivers and Harbors concurs in general in the views and recommendations of the reporting officers. The Board believes, however, that the proposed plan should be given general approval, and that only the Spewrell Bluff, Lazer Creek, and Lower Auchumpkee Creek Reservoirs should be authorized for construction at this time. Accordingly, the Board recommends approval of the general plan presented by the reporting officers at estimated Federal costs of \$217,000,000 for construction and \$1,750,000 for operation, maintenance, and major replacements as a guide for the immediate and future development of the water resources of the Flint River Basin; authorization of Spewrell Bluff, Lazer Creek, and Lower Auchumpkee Creek Reservoirs at estimated costs to the United States of \$151,820,000 for construction and \$1,068,000 annually for operation, maintenance, and major replacements, subject to certain local cooperation; and that Spewrell Bluff Reservoir be undertaken as the initial step in the provision of the plan.

4. I concur in the recommendations of the Board.

W. K. WILSON, Jr.,  
Lieutenant General, U.S. Army,  
Chief of Engineers.

CORPS OF ENGINEERS,

U.S. ARMY,

BOARD OF ENGINEERS FOR

RIVERS AND HARBORS,

Washington, D.C., May 4, 1962.

Subject: Flint River, Ga.

To: Chief of Engineers, Department of the Army.

1. Authority: This report is in response to the following resolution adopted June 1, 1948:

*"Resolved by the Committee on Public Works of the United States Senate, That the Board of Engineers for Rivers and Harbors, created under section 3 of the River and Harbor Act, approved June 13, 1902, be, and is hereby, requested to review the report on the Apalachicola, Chattahoochee, and Flint Rivers, Georgia, Alabama, and Florida, submitted in House Document Numbered 342, Seventy-sixth Congress, first session, and prior reports, with a view to determining if it is advisable to provide a nine-foot depth for navigation in the Flint River to Albany, Georgia."*

It is also in review of reports on a survey of Flint River, Ga., authorized by the River and Harbor Act approved July 24, 1946.

2. Physical description: Flint River rises 350 miles above its mouth and 1,000 feet above mean sea level in the southerly outskirts of Atlanta, Ga., the largest city in the Southeast. It crosses the fall line, marking the division of the Piedmont Plateau and the Coastal Plain, between river miles 230 and 285, falling 370 feet in 55 miles. It joins the Chattahoochee River to form the Apalachicola River, 108 miles above Apalachicola Bay, an arm of the Gulf of Mexico. The drainage area of Flint River is 8,460 square miles; Chattahoochee River, 8,650 square miles; and the entire Apalachicola-Chattahoochee-Flint system, 19,170 square miles. The Flint basin is 210 miles long and has a fairly uniform width averaging

40 miles. Bankfull capacity ranges up to 36,000 cubic feet per second. The maximum flood of record at Bainbridge, 29 miles above the mouth, January 1925, had a discharge of 101,000 cubic feet per second.

3. Existing improvements: A local flood-protection project has been completed at Montezuma, Ga., and another at Americus, Ga., has been approved, both under the general authority for small flood-control projects. The authorized project now under construction provides for multiple-purpose developments and supplemental channel work to give a channel depth of 9 feet for a minimum width of 100 feet in the Apalachicola-Chattahoochee River upstream to Columbus, Ga., 268 miles, and 20 miles up Flint River to Bainbridge, Ga. Buford Dam and Reservoir, at mile 348.3 above the junction of Chattahoochee and Flint Rivers, for flood control, hydroelectric power, navigation, and other uses, was essentially completed in 1957. Jim Woodruff, the lowermost lock and dam located just below the junction was essentially completed in 1957 for hydroelectric power and navigation, providing navigation project depths to Columbia on Chattahoochee River and Bainbridge on Flint River. The two remaining locks and dams, both on the Chattahoochee River, are under construction. These are Columbia for navigation and Walter F. George for navigation and hydroelectric power.

4. General economy: The Flint River basin is predominantly rural. Its population in 1960 was 397,000. The city of Atlanta, with a total population of 487,500 in 1960, is partly within the basin at the extreme northern tip. Albany, the largest city wholly within the basin, had a 1960 population of 55,900 and Bainbridge, 12,700. The population of urban communities increased substantially over the past 10 years. Agriculture contributes the most to the basin economy. In recent years there has been a significant growth in industry, mostly textiles, lumber, and wood products. Forests, predominantly pine, cover half the basin area. The principal minerals produced are sand, clay, and limestone.

5. Water problems: The principal commodities economically adaptable to movement by waterway in this locality are petroleum products, wood and paper products, chemicals, fertilizer, and coal. Existing waterway traffic, all inbound, is along the lower 29 miles of Flint River up to Bainbridge, Ga. The principal commodities being moved are petroleum products, road oil, grain, and sulfur. Above the Jim Woodruff pool, which extends to Bainbridge, the river is steep. A total lift of 76 feet would be needed to bring slack water navigation to Albany, Ga.

6. Flood damage above the fall line is small. Below the fall line to the mouth of the river, the flood plain area is 116,000 acres of which 3,800 acres are urban at Albany, Radium Springs, Newton, and Bainbridge. Of the rural lands, 20 percent are cleared for agricultural use and the balance are in woods. Except for the urban areas, flood losses are widely distributed over the long, relatively narrow, flood plain. Total flood losses below the fall line are estimated at \$180,000 annually. Fifty-six percent of the loss is to agriculture, about half of which is to crops; 37 percent is to urban development; and the balance, or 7 percent, is to public roads and railroads.

7. Power needs in the region are increasing rapidly. The logical market for Flint River power would be most of Alabama and Georgia, southeastern Mississippi, and that part of Florida located south of Alabama (power supply areas 22 and 23 of the Fed-



eral Power Commission). The fall line reach of the river provides the most favorable opportunities for development of hydroelectric power.

8. Municipal and industrial water supplies are adequate for the present needs in the Flint Basin. Future needs can be met by Flint River and its principal tributaries. The pollution problem in the basin as a whole is not serious. Some pollution exists, however, at certain of the urban areas along the stream.

9. Improvements proposed: The district engineer finds that the best plan of improvement for Flint River would be three multiple-purpose reservoirs in the headwaters and two locks and dams on the river below Albany, Ga. All three headwater reservoirs would be on the main stream and each would provide for flood control, hydroelectric power generation, general recreation, and fishing recreation. The two locks and dams would bring the 9-foot navigation channel to Albany, Ga. In addition, each would provide general and fish and wildlife recreation, and one of them would generate hydroelectric power. Pertinent physical data follows:

#### Upstream multiple-purpose reservoirs

Item	Spewrell Bluff	Lazer Creek	Lower Auchumpkee Creek
Dam location, Flint River (miles above mouth).....	263.4	255.7	233.4
Drainage area above dam (square miles).....	1,210	1,410	1,970
Type of dam: Concrete gravity, rolled-earth ties to abutments.			
Spillway: In concrete section, gated.			
Elevations (feet, mean sea level):			
Maximum pool.....	714.4	548.5	439.1
Top of flood control pool (top gates).....	709.0	547.0	425.0
Top of power pool.....	700.0	543.0	417.0
Minimum power pool.....	670.0	533.0	407.0
Reservoir storage (acre-feet):			
Gross at top of gates.....	730,000	342,000	548,000
Usable:			
Flood control.....	230,000	45,000	145,000
Power.....	322,000	88,000	135,000
Reservoir area, top of power pool (acres).....	16,800	9,900	15,600
Total installation (kilowatts).....	100,000	87,000	81,000
Firm installation (kilowatts).....	90,000	87,000	81,000
Load factor (percent).....	10	10	10
Average annual energy (million kilowatt-hours).....	133.0	121.6	122.8

#### Downstream multiple-purpose locks and dams

Item	Raccoon Creek	Lower Vada
Dam location, Flint River (miles above mouth).....	79.9	43.4
Drainage area above dam (square miles).....	5,570	7,110
Lock:		
Chamber (feet).....	82x450	82x450
Minimum depth over sills (feet).....	13	13
Maximum lift (feet).....	27	49
Elevation (feet, mean sea level):		
Normal upper pool.....	153	126
Normal power pool.....		126
Minimum power pool.....		125
Power pondage (acre-feet).....		11,000
Reservoir area, normal pool (acres).....	2,900	12,800
Installed capacity (kilowatts).....		28,000
Average annual energy (million kilowatt-hours).....		167

10. Costs and feasibility: The estimated first cost, annual charges, and economic feasibility are:

#### Upstream multiple-purpose reservoirs, 1st phase

[In thousands of dollars]

Item	Spewrell Bluff	Lazer Creek	Lower Auchumpkee Creek	Total
First cost (1961 prices).....	64,300	41,050	49,320	154,670
Annual economic charges:				
Interest and amortization.....	1,951	1,246	1,498	4,695
Operation, maintenance, and major replacements.....	472	356	428	1,256
Taxes foregone.....	684	626	583	1,893
Total.....	3,107	2,228	2,509	7,844
Average annual economic benefits:				
Power.....	2,436	2,206	2,085	6,727
Flood control.....	409	82	380	871
General recreation.....	432	254	404	1,090
Fishing recreation.....	295	174	276	745
Navigation.....	34	9	15	58
Total.....	3,606	2,725	3,160	9,491
Ratio of benefits to costs.....	1.2	1.2	1.3	1.2

#### Downstream multiple-purpose locks and dams, 2d phase

[In thousands of dollars]

Item	Raccoon Creek	Lower Vada	Total
1st cost (1961 prices).....	20,370	45,730	66,100
Annual economic charges:			
Interest and amortization.....	602	1,355	1,957
Operation, maintenance, and major replacements.....	222	559	781
Taxes foregone.....		202	202
Total.....	824	2,116	2,940
Average annual benefits:			
Power.....			1,039
Navigation.....			869
General recreation.....			320
Fishing recreation.....			159
Total.....			2,387
Ratio of benefits to costs.....			0.8

11. First costs and annual economic charges include Federal costs for preauthorization studies, Federal costs for public use and access facilities, and non-Federal costs for public-use facilities. Federal and non-Federal work costs are:

#### Upstream multiple-purpose reservoirs

[In thousands of dollars]

Item	Spewrell Bluff	Lazer Creek	Lower Auchumpkee Creek	Total
First costs:				
Federal preauthorization studies.....	\$33	\$22	\$25	\$80
Non-Federal public-use facilities.....	1,100	650	1,020	2,770
Federal work.....	63,167	40,378	48,275	151,820
Total first cost.....	64,300	41,050	49,320	154,670
Operation, maintenance, and replacements:				
Non-Federal public-use facilities.....	74	44	70	188
Federal work.....	398	312	358	1,068
Total.....	472	356	428	1,256

#### Downstream multiple-purpose locks and dams

[In thousands of dollars]

Item	Raccoon Creek	Lower Vada	Total
First costs:			
Federal preauthorization studies.....	11	24	35
Non-Federal public-use facilities.....	170	730	900
Federal work.....	20,189	44,976	65,165
Total first cost.....	20,370	45,730	66,100
Operation, maintenance, and replacements:			
Non-Federal public-use facilities.....	11	90	101
Federal work.....	211	469	680
Total.....	222	559	781

A cost allocation to the respective purposes was made for each of the upstream reservoirs. The separable costs—remaining benefits method was used. The costs so allocated were the total Federal annual costs plus the taxes foregone because of Federal power development. The interest rate used was 2½ percent and the period of analysis, 100 years. The annual costs to be recovered from the sale of hydroelectric power, as presently estimated by the reporting officers, are:

Spewrell Bluff Reservoir.....	\$1,502,000
Lazer Creek Reservoir.....	1,210,000
Lower Auchumpkee Creek Reservoir.....	1,192,000

12. Recommendations of the reporting officers: The district engineer finds that the Spewrell Bluff, Lazer Creek, and Lower Auchumpkee Creek Reservoirs in the headwaters, and the Raccoon Creek and Lower Vada projects below Albany, Ga., would provide the best development for the Flint River. He recommends that the existing project for the Apalachicola, Chattahoochee, and Flint Rivers be modified to include the plans prescribed in his report. He also recommends that the headwater reservoirs be constructed as the first phase of the plan for the Flint River Basin, and that of these, Spewrell Bluff be undertaken as the initial step. He further recommends that the extension of a 9-foot navigable channel from the head of the existing project to Albany, Ga., by development of the Raccoon Creek and Lower Vada projects be scheduled for 1980. The division engineer concurs.

13. Public notice: The division engineer issued a public notice stating the recommendations of the reporting officers and affording interested parties an opportunity to present additional information to the board. Careful consideration has been given to the communications received.

#### VIEWS AND RECOMMENDATIONS OF THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS

14. Views: The Board of Engineers for Rivers and Harbors concurs in general in the views and recommendations of the reporting officers. It believes that the proposed improvements provide the most suitable development of the water resources of the Flint River Basin, and that they should be undertaken by the United States. It believes, further, that the proposed plan should be given general approval and that the three upstream reservoirs, namely Spewrell Bluff, Lazer Creek, and Lower Auchumpkee Creek only should be authorized for construction at this time. It believes, further, that local interests should be required to prevent encroachment on downstream channels that



would interfere with the efficient operation of the proposed upstream reservoirs.

15. Recommendations: The Board accordingly recommends—

(a) That the general plan presented by the district engineer for accomplishment at an estimated cost of \$217 million for construction and \$1,750,000 for operation, maintenance, and replacements, be approved as a guide for the immediate and future development of the water resources of the Flint River Basin; and

(b) That Spewrell Bluff, Lazer Creek, and Lower Auchumpkee Creek Reservoirs on Flint River, Ga., for hydroelectric power, flood control, general recreation, and fishing recreation be authorized for construction and that Spewrell Bluff Reservoir be undertaken as the initial step, generally in accordance with the plan of the District Engineer and with such modifications thereof as in the discretion of the Chief of Engineers may be advisable, at an estimated cost of \$151,820,000 for construction and \$1,068,000 annually for operation, maintenance, and major replacements: *Provided*, That local interests agree to prevent encroachment on downstream channels that would interfere with the efficient operation of the proposed upstream reservoirs.

For the Board:

WILLIAM F. CASSIDY,

Chairman, Major General, U.S. Army.

#### MESSAGE FROM THE HOUSE

A message from the House of Representatives, by Mr. Maurer, one of its reading clerks, announced that the House had agreed to the report of the committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H.R. 11970) to promote the general welfare, foreign policy, and security of the United States through international trade agreements and through adjustment assistance to domestic industry, agriculture, and labor, and for other purposes.

#### FLOOD CONTROL ACT OF 1962

The Senate resumed the consideration of the bill (S. 3773) authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

Mr. BOGGS. Mr. President, I call up my amendment designated "10-2-62-C" and ask that it be read.

The PRESIDING OFFICER. The amendment will be stated.

The LEGISLATIVE CLERK. On page 53, lines 7 and 8, it is proposed to strike out the following:

"Knowles Dam and Reservoir, Flathead River, Montana;"

On page 53, beginning with line 22, strike out all through line 3 on page 54.

Mr. BOGGS. Mr. President, I yield myself 15 minutes.

This is a simple amendment, as can be seen. It deletes from the bill the provision for Knowles Dam and Reservoir, Flathead River, Mont., a project estimated to run to a total cost of \$2¼ billion, or more. In my opinion, this project should be deleted from the bill for further consideration, study, and review.

This project apparently appears so questionable that the Committee on Public Works of the other body did not even hold hearings on it and did not include it in the bill.

So, Mr. President, I ask myself, Why should it be included in this bill? Under the circumstances, I cannot understand how the other body could accept this item in conference.

Although there are many other reasons why this project should be deleted—and as I proceed, I shall try to mention them—it seems to me that the overriding issue is a matter of policy and principle of utmost and vital concern to the Nation, to each State, and to the people. The issue involves whether we have a Federal-State system of government under the Constitution or simply a central government.

The question is, Should the Federal Government override the reasoned opposition of the State government, expressed consecutively by five State government administrations, both Democratic and Republican, regarding the desirability of having the Federal Government construct a dam and reservoir project located entirely within the State?

I can not believe that the U.S. Senate wishes to go this far against the wishes of the State, as so well reasoned by five consecutive Governors of the State since 1948, and up to and including the present administration.

I am sure each Governor and his administration had the utmost concern for, and interest in, the welfare of the State of Montana, as well as the development of the Northwest area. Therefore, it appears that in these best interests, they have opposed the project. Let me quote from the testimony of Gov. Tim Babcock, the present Governor of the State of Montana:

I am opposed to Knowles Dam because it is not good for Montana or the country. In opposing it, I join with every Governor who has served the people of Montana since the Knowles and Paradise projects were discussed as long as 20 years ago. These Governors include Sam C. Ford, John Bonner, J. Hugo Aronson and Donald G. Nutter. Both Republican and Democratic political faiths are represented in this group.

I have every confidence that these Governors and their State administrations based their judgment on sound reasoning. In the course of the hearings held by our committee, the objections to the Knowles project were briefly as follows:

First. It is an economic detriment to the area.

Second. It is not a feasible project.

Third. It is not needed for flood control.

Fourth. It would be detrimental to recreation and fish, wildlife, and other conservation resources.

Fifth. Feasible alternative projects are available.

Sixth. And this is very important: Treaty rights of the Flathead Indians are jeopardized by the project.

I wish to consider each of these points briefly:

First. The economic detriment of the Knowles project to Montana is based upon the facts that some 59,000 acres of land would be flooded by the reservoir; 9,000 acres of irrigated, fertile, highly productive land would be taken out of production; approximately 1,300 people would be displaced; three towns would be wiped out; and both the headquarters of the National Bison Range and the Flathead Indian Agency would be inundated; 35 miles of railroad lines, 115 miles of highways and roads, and 158 miles of utility and pipelines would be flooded; the Flathead irrigation project, constructed by the U.S. Irrigation Service, irrigating some 138,000 acres of land, would be seriously jeopardized, in its repayment contract, by the loss of some 6,747 acres of land from the project; the estimated annual loss of \$2,700,000 in gross income to the area, caused by flooding of lands, would create an unrecoverable economic loss; and the forest-products industries would suffer a great setback, because of inaccessibility created by such a reservoir.

Second. The Knowles project is considered not a feasible project, for the following reasons, supported by testimony at the hearing: The Army Engineers seem to have underestimated the cost of the project, in that the relocation of the railroad line has been underestimated by as much as nearly \$33 million; no consideration was given to costs that would be occasioned by flooding two, and possibly three, valuable damsites owned by the Indians of the Flathead Reservation, and testimony developed by the Indian tribes places the annual value of these sites at about \$4½ million; the treaty with Canada for the development of the Columbia River Basin, which has been ratified by the Senate, and is expected to be ratified by Canada, provides for substantial amounts of storage on the Columbia River in Canada, which has a material effect upon the feasibility of the Knowles project, because the Canadian storage would greatly reduce any flood-control value of the Knowles project; on a 50-year basis, the corps estimated the benefit-cost ratio to be 1.08 to 1. Testimony before the committee indicated that if the Engineers had not underestimated the costs involved, the ratio at best would have been .70 to 1, or a deficit benefit-cost ratio; figured on a 100-year basis, the Army Engineers came up with a benefit-cost ratio of 1.2 to 1. However, testimony was presented, using what were considered to be more realistic cost figures; and the benefit-cost ratio at best came to .79 to 1, or a deficit benefit-cost ratio, even on a 100-year basis. When one adds to this the other considerations mentioned before, involving the large and serious displacement of people and the adverse effect upon the economy of Montana, it is almost impossible to escape the conclusion that the project is of questionable feasibility.

Mr. MANSFIELD. Mr. President, at this point will the Senator from Delaware yield?

The PRESIDING OFFICER (Mr. PROXMIER in the chair). Does the Sen-



ator from Delaware yield to the Senator from Montana?

Mr. KERR. Mr. President, I shall yield additional time, if the Senator from Delaware cares to yield at this point.

Mr. BOGGS. Mr. President, I should like to continue with my statement; and then I shall be glad to yield.

I continue to state the list of objections to the Knowles project.

Third. The Knowles project is not needed for flood control and recreational benefits. The Corps of Engineers estimated that the flood-control benefits would not amount to more than 3 percent of the annual benefits of the project, and that the recreational benefits represent about one-half of 1 percent of the total estimated annual benefits. So these considerations are of very little value in justification of the project, and make it clear that the project is not needed for flood control or recreation.

Fourth. The Knowles project is a detriment to fish, wildlife, and other conservation resources, according to much of the testimony presented at the hearing. This testimony indicated that the National Bison Range would virtually be destroyed, and that fish and wildlife and conservation would suffer a great disservice as a result of the Knowles project.

Fifth. Other feasible alternative projects which are available do not have the serious drawbacks and disastrous results that the Knowles project would apparently have. Both the Flathead Indian Tribes and the Montana Power Co. have before the Federal Power Commission applications for the construction of projects at sites known as Buffalo Rapids No. 2 and No. 4. These sites, according to testimony before the committee, would be flooded by the Knowles project. Testimony showed that while they do not have the storage capacity that the Knowles project would have, yet they would have substantially the same power capacity at a much lower cost. The Knowles project is estimated to cost \$1,010 per kilowatt, as compared to \$175 per kilowatt at the Buffalo Rapids sites. The fact that these alternative plans are available seems to strengthen the conclusion that this project should not be authorized in this bill, and that further study and review should be given to it.

6. According to the testimony, the treaty rights of the Indians on the Flathead Reservation would be jeopardized by the authorization of the project at this time. Probably the Senate Interior and Insular Affairs Committee should take a look at the project. Officials of the Indian tribes appeared before the committee in opposition to the project, to point out their treaty rights and to have our Government respect and recognize them.

I was impressed by the strong position the Indians presented before the committee. The point was well made that their rights should be considered before the project is authorized in determining the overall benefit-cost ratio and feasibility of the project. Otherwise, they are left in the position that, even though discussions had been had with them over

a period of time, and no matter how fairly and courteously presented, they have to take or leave whatever is offered to them. This seems to be in violation of the spirit of their treaty and the trusteeship of the U.S. Government.

In conclusion, I believe the amendment deleting this project should be adopted. This is especially so since the State in which this project would be constructed has, five times consecutively, under both Democratic and Republican administrations, uniformly and consistently expressed its opposition to the project.

It seems to me, everything considered, that the question is simple: Should the Federal Government override the reasoned and uniform opposition of the State of Montana to a project located entirely within the State?

I reserve the rest of my time.

The PRESIDING OFFICER (Mr. PROXMIER in the chair). The Senator from Montana.

Mr. METCALF. Mr. President, in the absence of the Senator from Oklahoma [Mr. KERR]—

The PRESIDING OFFICER. Does the Senator yield time?

Mr. METCALF. The Senator from Oklahoma has just entered the Chamber.

The PRESIDING OFFICER. Does the Senator from Oklahoma yield time to the Senator from Montana?

Mr. KERR. Mr. President, I yield myself 5 minutes first.

I deeply regret that the Senator from Delaware has offered this amendment. Would he respond to a request not to press it?

Mr. BOGGS. I did not quite hear the request.

Mr. KERR. Would the Senator from Delaware yield to a request not to press this amendment?

Mr. BOGGS. I would like to press it to a vote.

Mr. KERR. Very well. I yield myself 5 minutes.

I am surprised that the amendment is offered by the Senator from Delaware. The statement that he has made about his amendment sounds like the record of statements that the Senator from Oklahoma has heard on this floor with reference to many omnibus rivers and harbors authorization bills since the Senator from Oklahoma came here. It is a restatement or recapitulation of the evidence that has been presented to the committee time and time again by those opposed to the development of our water resources.

My good friend from Delaware said he was interested in the Governors' viewpoint, because they had the welfare of the people at heart. I am sure that is true. I think it is entirely possible that the Senators from the various States have the welfare of their people at heart. I am sure there is no Senator who would admit that he does not have. Some of us even claim it.

The distinguished Senator says this project is not economically feasible. I must say to him that the Corps of Engineers found that it was. If there is an agency in Government that is staffed by men and women who are technically

qualified to perform the duties assigned to them, it is the Corps of Engineers.

All Senators make appointments of young men in their States to the various service academies. The ones that the Senator from Oklahoma appoints are made as a result of competition. Oftentimes there are 50 applicants for 1 appointment. The Senator from Oklahoma tries to choose the best qualified to give the appointments to.

Then the appointees go to the service academies. They have to compete there in order to stay in the academies. I presume that 35 to 40 percent of those who receive appointments to the service academies and who attend them fail to graduate.

I wonder if the Senator from Delaware knows that most of the assignments to the Corps of Engineers are made from the top 10 percent of the graduating class each year at West Point. If there is a highly trained, competent group of engineers in the United States or on this earth, they are to be found in the Corps of Army Engineers.

A few years ago, when I was chairman of the Subcommittee on Rivers and Harbors of the Public Works Committee, the Chief of Engineers appeared before the subcommittee as a witness. I had asked him to canvass every project authorized by Congress and constructed by the Corps of Engineers in its long history, and to give a report to the committee of the value of them on the basis of experience, as compared to the value of them as had been estimated by the Corps of Engineers which had provided the basis for the authorization. The average cost-benefit ratio of all the projects in the United States was 1.3 to 1, on the basis of the return of cost of operation and the cost of building over a lifetime of 50 years.

In his testimony, the Chief of Engineers said that actual experience had proved that, instead of a cost-benefit ratio of 1.3 to 1 over a period of 50 years, on the basis of return of cost of operation and cost of construction, actually the economic value of the projects were such that they had returned to the economy of the United States and the Government the cost of the operation and the complete return of the investment in an average of 10 years.

What a compliment to the conservative, efficient, forecasting of the value of the projects.

The project which the Senator from Delaware seeks to strike from this bill was evaluated by the Corps of Engineers, the Board of Rivers and Harbors, the Chief of Engineers, and then by the Director of the Bureau of the Budget of the U.S. Government.

All of them said that it was economically feasible. Under that circumstance, it would be a little presumptuous of me to say it was not economically feasible. I permit other Senators to judge for themselves as to the merit of the statement by the Senator from Delaware that it would not be economically feasible.

The PRESIDING OFFICER. The time of the Senator from Oklahoma has expired.



Mr. KERR. Mr. President, I yield myself an additional 5 minutes.

Last year there was before the Congress of the United States a request to approve an interstate compact among the States of the Delaware River Basin, namely, New York, Pennsylvania, Delaware, and New Jersey. For two centuries those great States had been trying to resolve their differences with reference to the water rights of the various States in the tributaries of the Delaware River and the Delaware River itself. The authorizing legislation for the creation of the compact was passed by the Congress. Representatives of the States were appointed. They met, over a period of years. After centuries of controversy and dissension, a compact was arrived at and agreed to by those great States, approved by their Governors and by their legislatures, and brought back to the Congress.

Everybody wanted to approve it, but it could not be determined handily who had jurisdiction over the proposed legislation. I understand that the Judiciary Committee of the House considered it. It was passed by the House. It came to the Senate. I believe it was assigned to the Judiciary Committee. After the Judiciary Committee considered it, I believe the Committee on Interior and Insular Affairs asked to consider it.

The distinguished Senators from that area came to the Senator from Oklahoma and told him they did not seem to be making much progress in having the bill reported, and asked what the Senator from Oklahoma thought about having it considered by the Committee on Public Works. I told them that if a bill were introduced in a form to give the committee jurisdiction, the committee would do one thing—the committee would consider it and act upon it.

The bill was introduced. It was assigned to our committee. I think the other 2 committees then agreed that it might be acted upon by the Committee on Public Works.

The Governors of the States, Representatives from the States, Senators from the States, and others came before us. They asked that it be approved. They told us they sought the right to build their own water development projects. They asked us to provide that if they did, and when they did, the Federal preference clause for rural electric cooperatives and municipalities would not be included. In compliance with their request that was done.

I never saw men give more fervent assurances that they did not want any Federal funds, that they only wanted to be permitted to develop their own resources in accordance with their own compact and their own agreement.

Mr. President, on page 26 of this bill, lines 2 through 7, there is an authorization for \$192.4 million for the comprehensive development of the Delaware River Basin—New York, New Jersey, Pennsylvania, and Delaware.

The PRESIDING OFFICER. The time of the Senator from Oklahoma has again expired.

Mr. KERR. Mr. President, I yield myself an additional 5 minutes.

That is to be Federal money. If I had had false teeth, they would have dropped out of my head when I listened to the testimony in which this \$192 million authorization was sought by States which said they only wanted an opportunity to develop their own resources.

Somewhere in the report, Mr. President, is the specific statement to the effect that the eventual development of this basin may cost \$591 million, of which the Federal cost is estimated to be \$232 million.

At the request of the Senator from Delaware, on page 170 of the report there is this language:

The committee in approving the comprehensive plan of development for the Delaware River Basin desires to make it clear that no judgment was reached by the committee on Federal participation in the three projects—Hawks Mountain, Newark, and Christiana. This question of Federal participation in these three projects is open for further study.

If the testimony of the Governors of the States had been taken literally, Mr. President, that authorization would not be in the bill. But the Senators from the area wanted it. The Corps of Engineers justified it. The Bureau of the Budget approved it. The authorization is in the bill.

Each of those facts is true with reference to the project which the Senator from Delaware seeks to strike from the bill. So far as the Senator from Oklahoma is concerned, if the Montana project is stricken from the bill, the Senator from Oklahoma will make a motion to strike the Delaware River projects from the bill, because they have equal justification, and they have equal approval by the Corps of Engineers, by the Board of Rivers and Harbors, and by the Bureau of the Budget.

So far as the Senator from Oklahoma is concerned, the projects are on a parity in the bill, one as much justified as the other, the difference being that the people of Montana never did say that they wanted the right to build their projects, which was stated to the committee by the distinguished Senator from Delaware himself.

I believe the Senator referred to the fact that the Montana project had a benefit-to-cost ratio of 1.08 to 1. The Aquashicola and Maiden Creek projects, in the Delaware river Basin, have benefit-to-cost ratios of 1.1 to 1, which is not a difference to be greatly boasted about.

I sincerely hope, Mr. President, that the amendment of the Senator from Delaware will be rejected.

Mr. BOGGS. Mr. President—

The PRESIDING OFFICER. How much time does the Senator from Delaware yield?

Mr. BOGGS. I yield myself 3 minutes.

The PRESIDING OFFICER. The Senator from Delaware is recognized for 3 minutes.

Mr. BOGGS. Mr. President, I wish to respond briefly to the very distinguished acting chairman of the Committee on Public Works, my good friend from Oklahoma [Mr. KERR].

On the Delaware River Basin projects, I think that if the Senator will con-

sult the U.S. Corps of Engineers, on which we all greatly rely and which we indeed respect, he will find he has a misunderstanding as to the Delaware River Basin projects, as contained in the bill, and the Delaware River Basin compact. His understanding needs to be refreshed upon that subject.

I think every public works project must be weighed on its own individual merits. So long as I serve in the Senate, I hope to do that with respect to these matters, and not necessarily be for or against any project merely because of any pressures from any other point of view.

I hope that the Delaware projects will be considered on their merits. All I ask is that the Delaware River Basin projects stand or fall on their own merits.

In conclusion, Mr. President, there will be an opportunity for private enterprise, either the Indians or a private utility, to undertake this power project in the State of Montana. Applications are pending before the Federal Power Commission at the present time.

I repeat that there are serious questions involved in relation to our treaty rights with the Indians.

I say again, with respect to the \$250 million estimated overall cost, that if we have economy in mind, the place to start is with the authorization bill. Once a project is authorized, I do not see how we can do other than go along with it.

I point out the opinion of those in the State administration in opposition to this project. I laid emphasis on that point, and I still do. I mean in no way to detract from the high regard, respect, integrity, ability, and good intentions of the two distinguished and able Senators from the great State of Montana, both of whom I regard highly and admire greatly.

In conclusion, a basic question is involved as to whether the project should be reviewed in light of the problems which I have stated. Therefore I recommend adoption of the amendment.

Mr. MANSFIELD. Mr. President, will the Senator yield?

Mr. KERR. I yield.

Mr. MANSFIELD. With the concurrence of the chairman of the committee, I should like to suggest that time be yielded back to those in control of the time on the side against the Knowles Dam project, and that all time except 4 minutes be yielded back on the side for the project, and that 2 minutes be yielded to each of the Senators from Montana.

The PRESIDING OFFICER. Is there objection? The Chair hears none, and it is so ordered.

Mr. KERR. Mr. President, I yield 2 minutes to the junior Senator from Montana.

Mr. METCALF. Mr. President, it has been suggested that hearings were not held in the House, but that very adequate and comprehensive hearings were held in the Senate. The Senator from Delaware participated in the hearings. The hearings on the Columbia River project alone comprise 436 pages. They are on the desks of Senators.



Adequate and complete hearings for 2 days were held. Every opponent of the project had an opportunity to present his case.

It has been suggested that the Governor of Montana is opposed to the project. It is very significant that Mr. Hugo J. Aronson, ex-Governor of Montana, Mr. Bonner, ex-Governor of Montana, Mr. Wesley A. D'Ewart, ex-Representative from Montana, Mr. Ray M. Loman, an ex-legislator, and Mr. Winton Weydemeyer, an unsuccessful candidate—a great group of “exes”—supported the amendment of the Senator from Delaware [Mr. Boggs]. But the three individuals in the Congress who speak for the State of Montana and the area affected, and who represent the State of Montana in the House of Representatives and in the Senate, are speaking in favor of the Knowles project.

The question of State and Federal relationships does arise. But who speaks for the State of Montana in the Senate? A group of ex-Governors, a group of ex-legislators, and ex-Representatives or the Senators from Montana? Who speaks in the House of Representatives for western Montana but the Representatives from the First District?

I need not argue the question as to whether the project is feasible because the Senator from Oklahoma has already answered the question. He has already answered the argument that it is not needed for flood control.

The PRESIDING OFFICER. The time of the Senator has expired.

Mr. METCALF. May I have an additional half minute?

Mr. MANSFIELD. I yield a half minute to the Senator from Montana.

Mr. METCALF. It has been said that an application to build a feasible and alternate dam has been filed by the Montana Power Co. I wish to insert in the RECORD a list of the times that the Montana Power Co. has applied to build alternate dams. The first application is dated in June 1920. It is the fifth application on the docket of the Federal Power Commission. Time after time, down until Docket No. 2293, on November 1960, the company has requested and received more time to study, only to let its permit lapse. When we would suggest the building of a Federal dam, the company would come in with another application, and then let it lapse. Six different dockets are involved. I ask unanimous consent that the list be printed at this point in the RECORD.

There being no objection, the list was ordered to be printed in the RECORD, as follows:

HISTORY OF APPLICATIONS FOR PERMITS BY  
MONTANA POWER CO. AND ROCKY MOUNTAIN  
POWER CO. (A WHOLLY OWNED SUBSIDIARY)

DOCKET NO. 5

June 10, 1920, President Wilson signed Federal Water Power Act authorizing Federal Power Commission to issue licenses for purpose of constructing, operating and maintaining dams, power houses and related appurtenances on navigable waters or upon public lands and reservations.

June 19, 1920, 9 days later, Rocky Mountain Power Co., subsidiary of Montana Power Co., applied for a preliminary permit on pro-

posed project consisting of “5 power sites located on Flathead River.”

April 23, 1923, FPC voted suspension of application until receipt of report by Commission appointed by Secretary of Interior to investigate Columbia Basin project.

March 27, 1928, Rocky Mountain Power Co. applied for license on only one of sites, that closest to outlet of Flathead Lake.

May 23, 1930, FPC granted license for Kerr Dam to Rocky Mountain Power Co. (Subsequent 1937 request to transfer license to parent Montana Power Co. approved.)

DOCKET NO. 2135

May 22, 1953, Montana Power Co. applied for preliminary permit at Buffalo Rapids site, 4 miles downstream.

April 21, 1954, 1-year permit issued as of 4-154.

March 30, 1955, permit extended to 3-41-56.

May 21, 1956, permit again extended to 3-31-57.

DOCKET NO. 2163

July 23, 1954, Montana Power Co. applied for preliminary permit at Buffalo Rapids No. 2, 10 miles below Polson.

March 3, 1955, permit issued for 15 months effective February 1, 1955.

May 21, 1956, permit extended from April 30, 1956 to January 31, 1958 (permit allowed to lapse).

DOCKET NO. 2164

July 23, 1954, Montana Power Co. applied for preliminary permit at Buffalo Rapids No. 4, 19 miles below Polson.

March 3, 1955, permit issued for 15 months effective February 1, 1955.

May 21, 1956, permit extended from April 30, 1956 to January 31, 1958 (permit allowed to lapse).

DOCKET NO. 2223

November 2, 1956, Montana Power Co. applied for preliminary permit for high dam at Buffalo Rapids No. 4 (see above).

June 6, 1957, application denied.

DOCKET NO. 2293

November 1960, Confederated Flathead and Salish tribes applied for preliminary permits on Buffalo Rapids sites Nos. 2 and 4.

March 1961, Montana Power Co. applied for preliminary permits on Buffalo Rapids sites Nos. 2 and 4.

Mr. METCALF. Mr. President, I ask unanimous consent to have printed at this point in the RECORD an excerpt from the hearings as to the fish and wildlife situation in the area, and a sample of power company propaganda.

There being no objection, the excerpts were ordered to be printed in the RECORD, as follows:

EXCERPTS FROM TESTIMONY OF DR. SPENCER M. SMITH, JR., CITIZENS COMMITTEE ON NATURAL RESOURCES

Mr. Chairman, I am Dr. Spencer M. Smith, Jr., secretary of the Citizens Committee on Natural Resources, a national conservation organization with offices in Washington, D.C.

The Citizens Committee on Natural Resources want to strongly endorse the authorization for construction of the Knowles Dam on the Flathead River above the confluence with the Clark.

In the past, conservationists have often been misunderstood as to their attitude regarding water impoundments. It is often assumed that they oppose any development of resources. I am happy to make clear, however, that it is our goal to support development in areas that do minimum damage to other resource values. I remind the committee that most conservation organizations supported the high dam at Hells Canyon. They did not do so because of a preference for public power, but rather because

this was an area that could serve the flood control, hydroelectric power, and irrigation needs of a rather large area, at a site that did no serious damage to fish, wildlife, and other scenic resources.

We support the Knowles Dam construction since this site is quite consistent with the overall protection of a very wide area and will make unnecessary the construction of other projects that would offset seriously fish and wildlife resources. This is especially true regarding the Nine Mile Prairie Dam on the Blackfoot, as well as construction elsewhere on the Flathead.

It has been pointed out that the National Bison Range would be adversely affected by the construction of the Knowles Dam. Consultation with proper authorities of the Fish and Wildlife Service, however, indicates that only 11 percent of the range will be inundated, and other suitable land is available to compensate for this loss.

It appears prudent, therefore, to achieve this maximum development for this area at a site that enables us to have the best resource use for the many demands upon them at a minimum sacrifice.

It is hoped that the committee will look with favor on this project and recommend its early authorization.

[From the office of Senator LEE METCALF,  
Sept. 27, 1962]

SOME NEW YORK EDITORS SHOULD LEARN  
NEW VERSES

The proposed Knowles Dam on Montana's Flathead River is supported by conservation organizations including the National Wildlife Federation, Sierra Club, Wildlife Management Institute and Wilderness Society, the mayor of one of the small towns to be flooded, hundreds of persons in the two counties most directly affected (Lake and Sanders), the Sanders County Senator and Commissioner whose district will in part be flooded, and the principal farm, labor and rural electric organizations of Montana, Senator LEE METCALF, Democrat, of Montana, said today.

METCALF made his statement in a letter to the editor of the Wall Street Journal, which last week editorialized against Knowles.

Supporters also include, METCALF said, “the president of the chamber of commerce in the Sanders County seat whose small business handles forest products, an industry you said would be ‘upset’” by construction of Knowles.

METCALF noted that the Wall Street Journal, New York Daily News and Time Magazine, in their adverse comment on Knowles, “limited themselves to the testimony of one witness” among the dozens who testified for or against Knowles at 2 full days of hearings before a Senate Public Works Subcommittee.

The alternative to Knowles, two run-of-the-river dams proposed by the Montana Power Co., would produce “less than one-sixth the power that Knowles would and no flood control, as contrasted with more than 3 million acre feet at Knowles,” said Montana's junior Senator.

While Knowles would produce cheap and abundant power, the Montana Power Co.'s power would be costly, said Metcalf, pointing out that its rate of return, more than 9 percent, is higher than that of any other major utility in the country. About 85 percent of the company's stock, he said, is owned outside Montana.

“You may if you wish defend your editorial position” and METCALF, “as one which supports some of your leading constituents in the financial community which has received tens of millions of profit dollars collected in exorbitant rates charged two of every three Montana households by the Montana Power Co. But if you choose to meet head-on the issue of national benefits and repayment of



the dam's cost, I suggest that you and your colleagues on Time and the Daily News proceed beyond the chorus of antiphonal stanzas echoing from your triangle and learn some new verses."

PUBLIC SERVICE ELECTRIC  
AND GAS CO.,

Newark, N.J., October 1, 1962.

DEAR CONGRESSMAN: From time to time I have written you about expenditures by the Federal Government for public power projects. I herewith hand you a copy of a report that was recently sent to our stockholders concerning this subject.

Now comes along another rivers and harbors omnibus bill which includes a number of public power projects which companies in the area claim are unnecessary and a waste of Federal funds. I specifically refer to the Burns Creek project in Idaho, the Knowles Dam project in Montana, the China Gardens project in Idaho and Oregon, and the Devils Jumps project in Kentucky, and others, all of which I am sure will be fully discussed on the floor when the bill comes up.

I believe it is about time that this kind of thing was stopped. Anything you can do when the bill reaches the floor to eliminate such projects will be appreciated and at the same time you will be saving the taxpayers' money.

With kind regards, I am,

Sincerely,

RUSSELL H. WILLIAMS,

Vice President in Charge of Public Relations.

PUBLIC SERVICE ELECTRIC AND GAS CO.,

Newark, N.J., September 7, 1962.

To the Stockholders:

From time to time we have called to your attention our concern over the Federal Government's expanding role in the field of electric energy. We believe that it is our responsibility to continue to inform you, as stockholders and taxpayers, of the possible adverse effects of these various public power programs upon you and upon the industry in which you have invested. Measured in terms of total investment in plant and equipment and total taxes paid, the electric industry is this Nation's largest industry. No industry, however, can continue indefinitely to compete favorably with Government-subsidized and tax-exempt organizations.

The REA cooperatives are examples of such organizations now that the REA (Rural Electrification Administration) is deviating from its original purpose of providing assistance to the rural areas of America so that those areas could have electricity. The rapid and constant growth recorded by the REA co-ops is largely the result of assistance by the Federal Government in the form of low-cost loans. This money comes from taxpayers and is made available to the co-ops at 2 percent interest, even though the Federal Government must pay a higher interest rate for borrowing funds. Couple this obvious advantage with the fact that REA cooperatives pay little or no taxes and one can readily see why the co-ops can offer "cheap power" which, in reality, is subsidized by every taxpayer in the United States.

Having accomplished its original purpose of aiding the electrification of rural areas, REA has now stepped up its lending activity for generation and transmission facilities (G. & T.) in areas where investor-owned companies are able to supply the needed capacity. In the first 18 years of its existence, REA loans for G. & T. totaled only 18 percent of all electrification loans granted by the agency, but in 1961, G. & T. loans amounted to \$152 million, or 55 percent of the total. This year, the REA has authorized two of the largest loans in its history. One, for \$60 million, will go to the Indiana

Statewide Co-Op to build a 198,000-kilowatt generating plant near Petersburg, Ind., and the other, amounting to \$36.6 million, to the Basin Electric Power Co-Op in North Dakota for a 200,000-kilowatt generating plant. These G. & T. loans were made despite the contention of investor-owned companies serving these areas that their capacity was adequate to meet REA Cooperatives' demands, making the two projects wholly unnecessary.

In making these loans, REA has surrounded the loan applications with secrecy and failed to justify the need for the facilities, according to the investor-owned companies. A recent U.S. Senate report on the Food and Agriculture Act of 1962, commenting on REA financing, said: "To the extent that investor-owned companies provide service to all who desire it within their area, the need for Government loans is reduced. And to the extent that investor-owned companies make power available to REA borrowers at fair and reasonable rates, and on terms which permit them to serve all eligible customers within their service areas, the need and justification for loans for generating facilities disappears." On secrecy, the report said: "The REA should approach the consideration of such loans in a manner designed to provide as full public information as possible."

In addition to competition by REA co-ops, the investor-owned electric industry faces the competition of U.S. Government bureaus. In Montana, the U.S. Bureau of Reclamation has proposed building the Knowles Dam on the Flathead River. The investor-owned Montana Power Co. estimates that the Government would spend \$183,666,000 of taxpayers' money for power facilities having 256,000 kilowatts of generating capacity, notwithstanding the fact that the company already has a proposal before the Federal Power Commission to build two smaller dams on the same river to cost only \$42 million and generate 240,000 kilowatts of electricity. The Montana company estimates that the Government-planned project would lose about \$11 million a year, or a half billion dollars in 50 years whereas the company's program would provide \$138,600,000 in taxes in that period. The Government's Knowles Dam would flood 59,000 acres, displace 1,284 persons, cost above \$100 million for relocating railroads, power lines, pipelines and highways and destroy a famed national buffalo range. The company's two dams would flood only 8,800 acres, displace 12 people, cost \$310,000 for relocations, and leave the buffalo range undisturbed.

Another project, the much discussed and often rejected Passamaquoddy Bay tidal basin in Maine, has been revived for consideration. A responsible official of the Federal Government has labeled tidal power projects a "new frontier of energy" and stated that plans would be made for the development of these resources. Yet, as recently as a year ago, the International Joint Commission of United States and Canadian representatives declared this multimillion-dollar project was not economically feasible under present conditions.

Referring to the expansion of public power, Representative JOHN P. SAYLOR, of Pennsylvania, senior minority member of the House Interior and Insular Affairs Committee, speaking on the floor of the House on May 24, said: "If this move is not stopped and reversed immediately we are going to end up with a nationalized electric industry before we know it. The irony of the whole thing is that if there ever was an industry financed by private investors that needed no prodding, that needed no Federal financial help, it is the electric utility industry. Our existing electric companies are ready, willing and able to take care of all of our future power requirements furnishing ample

amounts of low-cost electricity to all consumers."

Your thinking on these matters will be of utmost interest to your legislative representatives in Washington.

DONALD C. LUCE,  
President.

Mr. MANSFIELD. Mr. President, what my distinguished colleague has said is correct. Applications have been filed, refiled, and filed again, but nothing has been done. The Washington Power Co. did build two dams on the lower stem of Clark's Fork, which is connected with the Flathead River, and thence to Cabinet Gorge and the Noxon Dam. Every single bit of power generated in Montana goes out of the State of Montana. We are losing a natural resource. What we want is another dam, a multi-purpose dam, such as we have in the Hungry Horse in the Flathead country, which will be of benefit to Montana.

If the Senate and the House eventually authorize the proposal, it is the intention of my distinguished colleague and myself, as well as the Representative from the western district of Montana, in which the project is located, to see to it that a preferential proportion of the power generated in western Montana is kept in western Montana for the benefit of the people of the whole State.

I hope that the Senate will not support the amendment of my good friend the Senator from Delaware.

The PRESIDING OFFICER. All time having expired, the question is on agreeing to the amendment of the Senator from Delaware [Mr. Boggs].

The amendment was rejected.

Mr. BOGGS. Mr. President, I have another amendment at the desk. I call up my amendment "10-2-62-D."

The PRESIDING OFFICER. The amendment of the Senator from Delaware will be stated.

THE LEGISLATIVE CLERK. On page 53, lines 9 and 10, it is proposed to strike out the following:

China Gardens Dam, Snake River, Idaho and Oregon.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Delaware.

Mr. BOGGS. Mr. President, the amendment is also simple. It would delete from the bill the China Gardens Dam project on the Snake River between Idaho and Oregon, a project which would cost an estimated \$74 million.

It seems to me this project should be deleted from this bill for further study and review, and to see what is finally done about the High Mountain Sheep Dam project planned for location immediately upstream.

The China Gardens project was not given a hearing. No hearings were held in the other body.

The facts will show that the question is merely whether the Federal Government should spend \$75 million to construct a project which private interests in the area are willing and able to construct at no cost to the taxpayers, and will obtain identical results. That is the question.

The facts, briefly stated, are these:



The China Garden Dam site is downstream from the High Mountain Sheep project which has been deferred. It has been deferred apparently because there is a pending license application before the Federal Power Commission by an investor-owned utility. Hearings before the Federal Power Commission have been completed and the decision on the license should be forthcoming soon.

The China Gardens project would be a regulating dam and power project to be used in connection with the High Mountain Sheep project. They are companion projects. The China Gardens project derives its benefits and justifications almost 100 percent from power generation; only two-tenths of 1 percent of the benefits from China Gardens are assigned to the only other purpose and that is recreation. An electric utility serving the area has committed itself before the Senate Public Works Committee to build China Gardens. This would save the taxpayers \$75 million. There is no doubt that the utility company is fully qualified in all respects to construct and operate China Gardens which will have to be completely coordinated with High Mountain Sheep. The hearings before our committee showed conclusively, I believe, that China Gardens would be constructed to accomplish the same results whether built with Federal or private funds.

The China Gardens project will not be needed for its primary operational purpose of reregulating the fluctuating water released from High Mountain Sheep until the High Mountain Sheep Dam is constructed. The power from China Gardens will not be needed until about 1970.

As I see this project, it is part of the development that must be coordinated with the High Mountain Sheep project just upstream, which has been deferred. By going forward at this time with the China Gardens project, we are getting the wagon before the horse. And, furthermore, the testimony shows that both the High Mountain Sheep and the China Gardens projects can be accomplished by private interests without any cost to the taxpayers and the same identical results obtained. So the simple question is: Why should the Federal Government spend \$75 million of the taxpayers' money on this project? I see no justification whatsoever for construction of this project where competent, resourceful private enterprise stands ready to build the same project and provide the same benefits.

I may say that it is my understanding that the private utility has indicated that if for any reason it should not get the High Mountain Sheep project license, it would have no objection to Federal construction of China Gardens because the High Mountain Sheep project, which, as I have pointed out, has been deferred, and the China Gardens project downstream should be coordinated together, since the China Gardens project is a reregulating project for High Mountain Sheep.

And, finally, it should not be forgotten that if the Federal Government builds China Gardens, it would cost the tax-

payors over \$75 million. On the other hand and of great significance and importance, it seems to me, to taxpayers throughout the Nation, is the fact that if China Gardens is undertaken by private enterprise, it would pay taxes estimated to be about \$75 million at present rates in the next 50 years and, of course, double that amount, or \$150 million in taxes paid, for the 100 years on which the Corps of Engineers based its China Gardens study.

Mr. KERR. Mr. President, I hope the amendment will not be agreed to. If the Senator from Delaware yields back the remainder of his time, I yield back the remainder of my time.

Mr. BOGGS. I yield back the remainder of my time.

The PRESIDING OFFICER. All time has been yielded back. The question is on agreeing to the amendment of the Senator from Delaware [Mr. Boggs].

The amendment was rejected.

Mr. KERR. Mr. President, are there any further amendments to be offered?

Mr. HARTKE. Mr. President, I send an amendment to the desk.

The PRESIDING OFFICER. The amendment will be stated.

Mr. HARTKE. I ask unanimous consent that the amendment be printed in the RECORD without reading.

The PRESIDING OFFICER. Is there objection? The Chair hears none, and it is so ordered.

The amendment is as follows:

At the end of the bill insert:

"WABASH BASIN INTERAGENCY WATER  
RESOURCES COMMISSION

"SECTION 301. There is hereby established a Commission to be known as the Wabash Basin Interagency Water Resources Commission, referred to in this title as the 'Commission'.

"SEC. 302. (a) Because a well-integrated and comprehensive plan of development and utilization of water resources in the Wabash River Basin can only be achieved on a co-operative basis with the participation of all affected Federal agencies, States, and local agencies and interests, it is essential that a full and complete investigation, study and survey be made of the land and water resources and their utilization for the region within the Wabash Basin, consisting of the watershed of the entire Wabash River and its tributaries, located within States of Indiana and Illinois.

"(b) It is intended that the Commission, in the performance of its duties will—

"(1) serve as the principal agency for the coordination of Federal, State, and local plans for the development of water and related land resources in the Wabash Basin;

"(2) prepare and keep up to date a comprehensive, integrated, joint plan for water and related land resources development in such basin;

"(3) recommend a long-range schedule of priorities for the collection and analysis of basic data, for investigation and project planning, and for construction of projects in such basin; and

"(4) foster and undertake studies of water resources problems in such basin.

"Sec. 303. The Commission shall be composed of members to be appointed by the President of the United States as follows:

"(1) A Chairman who shall not, during the period of his service on the Commission, hold any other position as an active officer or employee of the United States, but a retired military officer or a retired civilian officer or employee of the Federal Government may be

appointed under this clause without prejudice to his retired status and he shall be entitled to the compensation payable under this title or to his retired pay or annuity, whichever he may elect;

"(2) One member from each Federal department or agency determined by the President to have a substantial interest in the work to be undertaken by the Commission;

"(3) One or more members, as determined by the President, from each of the States of Indiana and Illinois, to be nominated by the Governor of such State, or, in the event of the failure of the Governor to nominate a person satisfactory to the President within sixty days after a request by the President to make a nomination, by the President upon his own nomination, and unless otherwise determined by the President, the term of each such member shall run for the same period as that of the Governor making the nomination; and

"(4) One member from each interstate commission created by a compact to which the consent of Congress has been given, which has jurisdiction over any of the waters of the Wabash Basin, to be nominated by such commission, or, in the event of the failure of such commission to nominate a person satisfactory to the President within sixty days after a request by the President to make a nomination, by the President on his own nomination.

"SEC. 304. (a) The Commission shall organize for the performance of its duties within thirty days after all of its initial members have been appointed and funds have become available for carrying on its work. At such time as he deems appropriate, the President may terminate the Commission, and all property, assets, and records of the Commission shall thereafter be turned over to such agency or agencies of the United States as the President may designate.

"(b) The Commission shall elect a vice chairman from among its members.

"(c) Vacancies in the Commission shall not affect its powers, but shall be filled in the same manner in which the original appointment was made.

"SEC. 305. (a) It shall be the duty of the Commission—

"(1) to engage in such activities and to make such studies and investigations as are necessary or desirable in the accomplishment of the purposes set forth in section 302 of this title;

"(2) to submit to the President a report on its work at least once a year, and such report shall be transmitted by the President to the Congress, and to the head of each Federal department or agency, the Governor of each State, and the chairman of each interstate commission, from which a member of the Commission has been appointed; and

"(3) to submit to the President a comprehensive, integrated, joint plan, and any necessary major revision thereof, for water and related land resources development in the Wabash Basin, but before the Commission transmits such plan or major revision to the President, it shall transmit a copy of the proposed plan or revision to the head of each Federal department or agency, the Governor of each State, and the chairman of each interstate commission, from which a member of the Commission has been appointed, and each such department and agency head, Governor, and commission chairman shall have ninety days from the date of the receipt of the proposed plan to report his views, comments, and recommendations to the Commission, and such views, comments, and recommendations shall be transmitted to the President with such plan or major revision after such modification by the Commission as may be necessary because of such views, comments, and recommendations.



"(b) Each member of the Commission, other than the Chairman, shall from time to time report on the work of the Commission to the head of the Federal department or agency, the Governor of the State, or the chairman of the interstate commission from which he was appointed, and shall present to the Commission for its consideration any comments or suggestions received as a result of such report.

"Sec. 306. (a) For the purpose of carrying out its duties under this title, the Commission may hold such hearings, sit and act at such times and places, take such testimony, receive such evidence, and print or otherwise reproduce and distribute so much of its proceedings and reports thereon as it may deem advisable; acquire, furnish, and equip such office space as is necessary; use the United States mails in the same manner and upon the same conditions as the departments and other agencies of the United States, employ such personnel as it deems advisable; purchase, hire, operate, maintain, and dispose of such vehicles as it may require; pay in accordance with the standardized Government travel regulations for travel, subsistence, and other necessary expenses incurred by it or any of its members, officers, or employees, in the performance of duties vested in it; and exercise such other powers as are consistent with and reasonably required to perform its functions under this title.

"(b) A majority of the members of the Commission holding office at any time shall constitute a quorum but a lesser number may conduct hearings.

"(c) The Chairman of the Commission, or any member thereof designated by him for the purpose, is authorized to administer oaths when it is determined by the Commission that testimony shall be taken or evidence received under oath.

"(d) To the extent permitted by law, all appropriate records and papers of the Commission may be made available for public inspection during the ordinary office hours of the Commission.

"(e) Upon request of the Chairman of the Commission or any member or employee thereof designated by him for the purpose, the head of any department or agency of the Government is authorized (1) to furnish to the Commission such information, suggestions, estimates, and statistics as it may need or believe to be useful for carrying out its functions and as may be available to or procurable by the department or agency to which the request is addressed, and (2) to detail to temporary duty with the Commission such personnel within his administrative jurisdiction as it may need or believe to be useful for carrying out its functions, and such department or agency shall be reimbursed for the services of such personnel.

"(f) The Chairman shall be responsible for (1) the appointment and supervision of personnel employed by the Commission, (2) the assignment of duties and responsibilities among such personnel, and (3) the use and expenditure of funds available to the Commission. In carrying out his functions under this subsection, the Chairman shall be governed by the general policies of the Commission with respect to the work to be accomplished by it and the timing thereof.

"Sec. 307. (a) Members of the Commission appointed pursuant to section 303(2) of this Act shall receive no additional compensation by virtue of their membership on the Commission, but shall continue to receive, from appropriations made for the agency from which they are appointed, the salary of their regular position when engaged in the performance of the duties vested in the Commission.

"(b) Members of the Commission appointed pursuant to section 303(3) and (4)

of this Act, shall each receive compensation at the rate of \$75 per day when engaged in the performance of the Commission's duties, but the aggregate compensation received by any such member shall not exceed \$7,500 in any calendar year. The per annum compensation of the Chairman shall be at the rate provided for grade GS-16 under the Classification Act of 1949, as amended, or if he is not employed on an annual basis, \$75 per day but not to exceed \$12,000 in any calendar year.

"Sec. 308. There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this title."

Mr. HARTKE. Mr. President, I yield myself 5 minutes. I have discussed the amendment with the distinguished Senator from Oklahoma.

Mr. President, on February 6, 1961, I introduced S. 811, a bill to establish a Wabash Basin Interagency Water Resources Commission. The commission would be composed of members of Federal departments which are principally concerned with water resources development, representatives of the State of Indiana and Illinois, and a representative of the Wabash Valley Interstate Compact Commission.

S. 811 was referred to the Senate Committee on Public Works, and it was reported favorably by that committee on June 6, 1961. In its report to the Senate the committee expressed these views:

Comprehensive water resources development plans have been prepared in the past for certain areas and found to be of great value in the formulation and selection of projects for construction. Examples of these studies are the comprehensive report on the New York-New England region and the equally comprehensive report on the Arkansas-White-Red River Basins in Southwestern United States. Other comprehensive studies, such as those on the Columbia, the Missouri, the Mississippi, and the Ohio, have provided to form an invaluable basis for the development of the water resources in those basins.

The Congress has authorized similar study commissions for the southeastern river basins of the United States and for certain southwestern river basins. The committee is of the opinion that the proposed study of the Wabash Basin will prove of equal value in the future development of the water and related resources of this extremely important area of our Nation.

The Senate then passed the bill on June 13, 1961.

On July 13, 1961, the President transmitted to the Congress his draft legislation implementing certain recommendations contained in his message of February 23, 1961, on natural resources. This legislation would provide for development of the Nation's natural resources through the establishment of a water resources council and river basin commissions. Subsequently, when the agency reports on my bill were sent to the House Committee on Public Works, they recommended against enactment of S. 811 saying that they believed the overall river basin water resources commission proposed by the President was preferable to individual river basin commissions for a particular area. Consequently, the House did not act on my bill.

It now appears, Mr. President, that the administration's recommended omnibus bill will not only fail to pass Con-

gress this year, but that perhaps it will not pass next year or the year after. An overall program such as he has proposed takes long and careful planning in order to be acceptable to the States and effective for the Nation.

It is for this reason, that I am proposing S. 811 as an amendment to the omnibus public works authorization bill before the Senate now. The Wabash Basin cannot afford to wait an interminable length of time for an effective and comprehensive planning body to coordinate flood control and water resources development. We have taken big steps in the last 3 or 4 years in initiating vitally needed flood control projects. The people of the Wabash Valley, which comprises 33,100 square miles and has a population of over 4 million cannot go on suffering year after year from the ravages of frequent and severe floods because of the lack of coordination and the stop-and-start history of our flood-control efforts. In recent years the monetary damages from these floods have amounted to \$140 million. These damages could have been prevented had there been a coordinated and planned effort of flood control which would have moved ahead 10 to 15 years ago.

Time is expensive and disastrous to our people of the Wabash Basin. I ask, therefore, that the Senate accept my amendment and give the Wabash Basin a chance to keep moving ahead.

The idea grew out of a visit made by the distinguished Senator from Oklahoma [Mr. KERR] to the Wabash Valley Association at its meeting in Mount Carmel, Ill., in 1960, where he delivered an excellent address and encouraged our people to become interested in protecting their water resources.

I should like to ask the distinguished Senator from Oklahoma to include the project as a provision in the bill so that we may proceed with the comprehensive development of the Wabash River Valley.

Mr. KERR. Mr. President, the amendment offered by the Senator from Indiana has been approved by the Public Works Committee on two different occasions, and was adopted and approved by the Senate on one occasion. It follows the pattern that has been in operation for at least the years that the Senator from Oklahoma has been in the Senate with reference to the resources of the river basins. I ask that there be done for the Wabash Basin what has been done for many others. I suggest that the amendment be adopted.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Indiana [Mr. HARTKE].

The amendment was agreed to.

#### DEVILS JUMP DAM PROJECT

Mr. KEFAUVER. Mr. President, I would like at this time to express my support for a project in the omnibus rivers and harbors bill on which I have worked for a long time. I refer to the Devils Jump Dam project on the Big South Fork of the Cumberland River Basin. This dam will be a great benefit for the States of Tennessee and Ken-



tucky. Although the dam would be physically located in McCreary County, Ky., its benefits would extend throughout northeast Tennessee, providing additional electric power, flood control, recreation, soil conservation, and other benefits. The cost of the dam has been estimated at approximately \$150 million, but I believe that this expenditure would be most reasonable in order to achieve the numerous benefits just enumerated. I might also point out that these benefits would accrue to an area of my State where there is presently a difficult and persistent problem with unemployment. The jobs, soil conservation, electric power and other benefits of the proposed Devils Jump Dam should be a great weapon in the fight against unemployment in these areas of Tennessee.

I might also say, Mr. President, that I have been interested in this project for quite some time and have been privileged to work on it in the past years with my colleagues from Tennessee and Kentucky. Over a year ago, in the first session of this Congress, Senator GORE and I introduced S. 2381 to authorize the construction of Devils Jump. I also participated with my good colleagues Senator COOPER and Senator GORE, and Congressman HOWARD BAKER, of Tennessee, and Congressman EUGENE SILER, of Kentucky, in conferences with the Budget Bureau in order to gain the approval of that agency to the Devils Jump project.

Today, I am equally happy to advocate authorization of Devils Jump in accordance with the Corps of Engineers' favorable recommendation on the project. It is a fine project proposed for an area of Tennessee and Kentucky which needs it badly. I sincerely urge the Senate to give the Devils Jump project favorable consideration.

Mr. KEFAUVER subsequently said: Mr. President, I have heretofore spoken in support of one of the projects, the Devils Jump Dam, which the Senator from Kentucky [Mr. COOPER] and I and our colleagues are interested in.

At this time I join in paying tribute to the distinguished Senator from Oklahoma [Mr. KERR] for his consideration and for his fairness, as well as to all the members of his committee, in the consideration of these projects. I feel that they are worthy projects; they are a part of the development of our great Nation. It is in the interest of our national heritage to develop our country for the welfare of our people. The Senator from Oklahoma and the members of his committee have rendered an outstanding service. It is a good bill. I am glad that it will be passed, and I hope it will be unanimously passed, by the Senate.

Mr. COOPER. Mr. President, I am very glad that the Public Works Committee, of which I am a member, placed in the bill on my motion, four projects, thus authorizing the Congress to provide funds for advance engineering and design, and construction, through the regular process of appropriations.

These projects are: Devils Jump Dam and Reservoir on the South Fork of the

Cumberland River, the Red River, Carr Fork, and Eagle Creek Dams and Reservoirs on the Kentucky River. The Booneville Reservoir has been previously authorized.

As these important projects are not included in the bill passed by the House, I earnestly hope that the Senate will support these Kentucky projects by an overwhelming majority, and that the Senate conferees will urge the House conferees to approve these projects so that their authorization may be completed. We have completed our approval in the Senate.

I, too, join in the compliments to our chairman, the Senator from Oklahoma [Mr. KERR], for his able leadership in the development of the pending bill and for the kindness and fairness which he showed to all the Members and also to those who came before the committee.

The PRESIDING OFFICER. The bill is open to further amendment. If there be no further amendment to be proposed, the question is on the engrossment and third reading of the bill.

The bill was ordered to be engrossed for a third reading, and was read the third time.

Mr. KERR. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of H.R. 13273, the companion House bill.

The PRESIDING OFFICER. The bill will be stated by title for the information of the Senate.

The LEGISLATIVE CLERK. A bill (H.R. 13273) authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

The PRESIDING OFFICER. Is there objection to the present consideration of the bill?

There being no objection, the Senate proceeded to consider the bill.

Mr. KERR. Mr. President, I ask unanimous consent that all after the enacting clause be stricken and that there be inserted in lieu thereof the text of the Senate bill, S. 3773, as amended.

The PRESIDING OFFICER. Is there objection? The Chair hears none, and it is so ordered.

Mr. KERR. Mr. President, I ask unanimous consent that technical corrections be made in the bill.

The PRESIDING OFFICER. Without objection, it is so ordered.

The question is on the engrossment of the amendment and the third reading of the bill.

The amendment was ordered to be engrossed, and the bill to be read a third time.

The bill was read the third time.

The PRESIDING OFFICER. The question is on the passage of the bill.

Mr. KERR. Mr. President, I thank the distinguished Senator from Kentucky, the ranking Republican member of the Public Works Committee, for his great contributions to the bill and for that of all members of the committee. The names of Senators who worked so hard in holding the hearings on the bill and considering it over long hours con-

stitute an honor roll. I am deeply grateful to each of them, and I express my congratulations to them on the contributions they have made in bringing about what I believe to be one of the great bills with which I have had any connections.

Mr. STENNIS obtained the floor.

Mr. STENNIS. Mr. President, I ask unanimous consent that I may yield to the Senator from Idaho for a brief statement.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. CHURCH. Mr. President, Idaho is the one State in the intermountain West with an abundance of water resources. The future of Idaho can be unlimited if we develop our rivers wisely and well. The pending bill is a great landmark for the State of Idaho. To the distinguished Senator from Oklahoma, who has had the floor management and leadership of the bill, I express the thanks of the people of Idaho, because our State has been most generously treated.

It has been a long, dry, barren period, preceding the enactment of the bill, because the policy of the previous administration, of no new starts, has meant that we have had to wait many years to get on with the comprehensive development of the water resources of Idaho. This bill will give us a blueprint for moving Idaho forward which is without precedent, and we are greatly indebted to all the members of the Public Works Committee, especially to the distinguished chairman of the subcommittee, who was in charge of the bill today, for the treatment that has been given to our State.

I close these remarks by expressing the hope that the projects which have been included in the bill for Idaho will go to conference and will remain in the bill following the conference. I know the members of the Senate committee will do everything possible to make certain that the projects are retained in the final version of the bill.

I extend my personal thanks and the thanks of the people of Idaho to the Senator from Oklahoma for his friendship and for the understanding he has shown of our problems which affect the future potential of our State and the future of the people of Idaho.

Mr. RANDOLPH. Mr. President, I address a question to the resourceful Senator from Oklahoma on behalf of the Senator from Pennsylvania [Mr. CLARK], who is intensely interested in several projects in the pending measure. In his absence, I wish to inquire concerning the authorization for the multiple purpose dam and reservoir on the Raystown Branch of the Juniata River in Pennsylvania. The proviso reads:

The installation of power generating facilities shall not be made until a reexamination report is submitted by the Corps.

The committee report indicates that the other "power features provided in section 203" shall apply to the Raystown project.

Does this mean specifically that the requirement in section 203, "penstocks and other similar facilities shall be in-



stalled in any dam authorized in this act," applies to this Raystown project in Pennsylvania, in which the senior Senator from Pennsylvania has a keen concern?

Mr. KERR. The answer to the question is "Yes." There is a section in the bill and in various public laws which requires the inclusion of penstocks in projects which have hydroelectric potential. The Raystown branch project definitely qualifies.

Mr. RANDOLPH. I thank the Senator from Oklahoma for his helpful answer. Under his proven leadership our committee has brought to the Senate a comprehensive measure for projects of value to our people in all sections of the country.

Now, Mr. President, in connection with this national program there are four projects in the measure which are of special significance to West Virginia, three of them calling for authorization of flood control works within the border of the State and the fourth being a combination flood control and water storage facility important to West Virginia, Maryland, Virginia and the District of Columbia.

In the latter instance I refer to the item for the North Fork of the Potomac River—a dam and reservoir near Bloomington, Md., and Piedmont, W. Va., with an estimated total cost of \$50,965,000. This is a very worthy project which will contribute much to the solution of Potomac River Basin problem of flood control, water supply, and water purification. Likewise, it will provide employment in the anticipated construction stage in sections of the States of Maryland and West Virginia where new employment opportunities and new payrolls are needed.

The three projects proposed for authorization within the actual borders of West Virginia are in the vast Ohio River Basin and are as follows: Justice Dam and Reservoir in the Guyandot River Basin at an estimated cost of \$60,477,000, with the impoundment area to be in Wyoming County and with flood protection intended to be afforded for that county, as well as Logan, Lincoln, and Cabell Counties. Especially damaging floods have been occurring almost annually in recent years in the city of Logan and other communities of Logan County and downstream into Lincoln and Cabell Counties. There have been some disputes concerning values and benefits involved in this project proposal, but no controversy over the need for flood control and protective measures. An extensive hearing was held and an adequate legislative history was compiled which indicates appropriateness of possible further hearings before any land is acquired and before construction begins. I hope satisfactory solutions will be found as this project moves through the planning and engineering phases to the end that parties in dispute with findings and recommendations of the Army Corps of Engineers will be disposed to be cooperative because, Mr. President, the flood protection, recreational benefits, and employment opportunities inherent in this project are most signifi-

cant and necessary for the Guyandot River Basin. In the development of the legislative history and the furthering of this project, I am privileged to commend the cooperation by my diligent colleague from West Virginia [Mr. BYRD], and three very capable colleagues in the other body, Representatives KEE, HECHLER, and SLACK. Senator BYRD has been particularly active on behalf of this project since he came to the Congress as a Member representing the Sixth Congressional District which included Logan County where the flood impacts have been most severe. The flood of record occurred in 1957 at Logan and spurred my colleague to sponsor the resolution under which the Guyandot River Basin studies were undertaken as the forerunner to the favorable action I urge today in authorizing this project.

Beech Fork Reservoir on Twelvepole Creek in Wayne County is proposed for authorization as another of the necessary flood control works in the Ohio River Basin. It is estimated to cost \$11 million and would be an important complement to East Lynn Reservoir in the Twelvepole Creek watershed where flooding likewise has been severe. During the hearing on this project, I was privileged to associate myself with the cogent and timely statement made by Representative HECHLER as the principal proponent of this worthy flood control proposal which also embraces important recreational benefits.

Buckhannon River channelization and realignment in the vicinity of the city of Buckhannon at an estimated cost of \$1,206,000 is necessary in the interest of providing flood control and protection to residential and commercial properties, as well as public roads and facilities, and parts of the campus of West Virginia Wesleyan College. There is a modest amount of local cost sharing involved in this worthy project and I strongly urge authorization of expenditures for the Federal share. Representative CLEVELAND M. BAILEY, whose district has embraced Upshur County, and Representative HARLEY O. STAGGERS, whose district now includes that county, have actively and helpfully supported and furthered the progress of this project and I gratefully commend their cooperation.

The projects for provision of flood control in the Guyandot River Basin, in the Twelvepole watershed, and in the Buckhannon River are estimated to cost a total of \$72,683,000 and, when authorized, funded and amortized, would represent Federal investments with favorable benefit-cost ratios. The \$50,965,000 North Fork of the Potomac Reservoir and water supply facility would be an especially important investment and is a project which has had a remarkable minimum of opposition.

Mr. STENNIS. Mr. President, I wish to commend the Senator from Oklahoma and his distinguished subcommittee for the unusual, excellent, and highly important work they have done on this excellent piece of legislation. As one who has helped to pass upon so many matters concerning our vast military program and essential expenditures, I have

a special warmth of appreciation for long-range items which will serve not only our generation, but also generations to come; which will be producing wealth, income, and the upbuilding of the economy and strength of the people of our great Nation.

There is no more zealous chairman of a subcommittee or acting chairman of a committee, and none more competent, than the Senator from Oklahoma [Mr. KERR]. He shows the greatest concern for our requests.

I proposed one project on an emergency basis, and not only the committee and the subcommittee, but also the Corps of Engineers and the Bureau of the Budget, extended themselves in overtime and extra work in order to bring the item to a focus, so the committee could pass upon it.

These projects constitute a great source of the strength of our Nation. I am one who feverently appreciates the work of the committee.

Mr. KERR. Mr. President, I am grateful to the distinguished Senator from Mississippi and other Senators for their kind remarks. I receive no greater joy in my service in the Senate than I do in connection with the authorization, the building, and the continuing of the building of these projects across the length and breadth of our 50 States. All of us, in our home areas, receive requests from constituents to assist in bringing industry to our States; and we do.

Every water development project is of itself a great industry; and every one of them is an incubator from which is hatched every day—and it will be so long as the program is in existence—industry for the development of local communities and the improvement of the economy of the area, the prosperity of the people, and the strength of the community, the State, and the Nation.

I do not know of any Senator who is more aware of that fact, or who has made a greater contribution to the program than the distinguished Senator from Mississippi. I am grateful to him.

Mr. JORDAN of North Carolina. Mr. President, I wish to join in all the pleasant things which have been said about the chairman of the subcommittee and the acting chairman of the Committee on Public Works. He has been most kind and gracious in helping us in every way possible. I think he has made one of the greatest contributions which has been made during the entire session of Congress in bringing the public works bill to passage.

As he has well said, these projects will last for many generations. One needs only to visit any country which does not have such projects to know why the economy is poor. I do not think any greater contribution can be made to the American economy than to develop our water resources.

A number of these projects will be constructed in North Carolina. I am deeply grateful for all the help I have received from the distinguished acting chairman of the committee and the chairman of the subcommittee.

The PRESIDING OFFICER (Mr. PROXMIRE in the chair). The question



is, Shall the bill pass? [Putting the question.]

The bill (H.R. 13273) was passed.

Mr. MANSFIELD. Mr. President, I move that the vote by which the bill was passed be reconsidered.

Mr. KERR. Mr. President, I move that the motion to reconsider be laid on the table.

The motion to lay on the table was agreed to.

Mr. KERR. Mr. President, I move that the Senate insist upon its amendments and request a conference thereon with the House of Representatives, and that the Chair appoint the conferees on the part of the Senate.

The motion was agreed to; and the Presiding Officer appointed Mr. KERR, Mr. McNAMARA, Mr. RANDOLPH, Mr. COOPER, and Mr. FONG the conferees on the part of the Senate.

The PRESIDING OFFICER. Without objection, Senate bill 3773 will be indefinitely postponed.

#### CONDITIONS AT OXFORD, MISS.

Mr. STENNIS. Mr. President, according to press reports, the number of regular military troops in the area in and around the campus of the University of Mississippi, including Oxford and nearby places, totals between 10,000 and 15,000. The reports vary, and it is almost impossible to get accurate figures. This number constitutes more than an Army division.

However, one thing is apparent and obvious to all. Far more troops are in Mississippi than can possibly be needed to meet any contingency.

In the early hours of Sunday morning, September 30, the entire Army and Air National Guard of the State of Mississippi were "federalized" and called to active duty. These orders affected 11,073 Mississippians from all walks of life. They affected businessmen, farmers, laborers, college students, lawyers, doctors, clerks, and, in short, men in every field of endeavor.

These men have been taken from their homes and their work and have been pressed into Federal service. More than 70 percent of them have been assigned no duties whatever but have been told only to report to their National Guard armory to engage in "training operations."

Only 3,000 of the more than 11,000 Mississippi National Guardsmen federalized have actually seen duty in the Oxford area. The 108th Armored Cavalry Regiment was the first to reach the campus on Sunday night. Other units pressed into service in that area include: First Battle Group, 155th Infantry; Second Battle Group, 155th Infantry; and 134th Surgical Hospital Unit.

The remaining 8,000 men in the Mississippi National Guard have been pulled away from their daily pursuits, pressed into service but have been completely idle. There is certainly no reason to believe that their services will be needed. I am told that in this group are from 700 to 1,000 college students who are missing classes and whose schoolwork, if they

are not permitted to return soon, will be seriously affected and cause them to fall far behind in their studies.

Mr. President, it is urgent and imperative that these unused units of the Mississippi National Guard be released from active Federal duty at once and be permitted to return to their homes and resume their normal daily activities. Their activity on military duty is unnecessary, and action should be taken immediately to release them.

Some 10,000 to 12,000 Regular U.S. Army troops, in addition to those I have mentioned, are now stationed in Mississippi, either in the Oxford area or at other points. Consideration has been given to the staging of a football game at Oxford on Saturday of this week. Of course, that would involve the handling of huge crowds which would come from many areas. A sense of the utmost caution has caused this game to be moved to Jackson, Miss., which is far removed from the site of the University of Mississippi, at Oxford.

Things are quiet there, and are quiet over the entire State. The point I make now is that the number of Regular U.S. soldiers there is far beyond the number which could possibly be needed. This is certainly neither the time nor the place for a regular and routine Army maneuver, exercise, or operation. The continued presence of the unnecessary, uninvited, and unwelcomed troops is oppressive to a free and peaceful people. Their continued presence will tend to create further tension.

I hope that all military forces can be removed from Mississippi soon.

I have gone into this matter thoroughly; I have kept in touch with it hour by hour; and I think I know what I am talking about in regard to the conditions.

I most seriously urge that our National Guardsmen, at least those not in actual use, be permitted to return to their normal activities, and not be compelled day after day to go to their armories or wherever their posts are. I also urge that immediate consideration, and therefore continued consideration, be given to reducing the number of the Regular U.S. soldiers there. In my humble opinion, the number there is far, far greater than the number who could possibly be put to any use; and their continued presence there could have no useful purpose.

I am urging these facts to the Department of Defense, to those in authority; and I wish to bring this report to the attention of the other Members of the Senate, including the fact that the situation in Mississippi is quiet and peaceful and there is no further need for this large number of Regular soldiers.

Mr. President, I yield the floor.

#### JANE FROMAN, GYPSY MARKOFF, AND JEAN ROSEN

Mr. MANSFIELD obtained the floor.

Mr. KEFAUVER. Mr. President—

Mr. MANSFIELD. I yield to the Senator from Tennessee, who wishes to bring up a measure which will take only a brief time.

Mr. KEFAUVER. Mr. President, I ask unanimous consent that House bill 12313, for the relief of Jane Froman, Gypsy Markoff, and Jean Rosen, be read twice by its title and be considered at this time.

The PRESIDING OFFICER. Is there objection? Without objection, it is so ordered; and the Senate will proceed to consider the bill.

Mr. KEFAUVER. Mr. President, this bill has been passed by the House, and has been approved by the Senate Judiciary Committee. I have been asked by the chairman of the committee to bring up the bill today in the Senate.

It is a claim bill for the benefit, in accordance with action of the Court of Claims, of three persons—Jane Froman, Gypsy Markoff, and Jean Rosen.

I may call attention to the fact that the Senator from Pennsylvania [Mr. CLARK] introduced a Senate bill for the relief of Jean Rosen. The Senator from Pennsylvania worked diligently in connection with the bill, and presented it to the Judiciary Committee and to the Senate. That bill, S. 3645, for the relief of Jean Rosen in the amount of \$20,000, has been passed. House bill 12313 provides a similar amount for her, so that after House bill 12313 is passed, the action taken by the Senate in passing Senate bill 3645 should be reconsidered, and Senate bill 3645 should be indefinitely postponed.

Mr. President, I ask for the third reading and passage of House bill 12313.

The PRESIDING OFFICER. If there be no amendment to be proposed, the question is on the third reading and passage of the bill.

The bill (H.R. 12313) was ordered to a third reading, read the third time, and passed.

Mr. KEFAUVER. Mr. President, I ask unanimous consent that the vote by which Senate bill 3645 was passed be reconsidered.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. KEFAUVER. Mr. President, I now ask that Senate bill 3645 be indefinitely postponed.

The PRESIDING OFFICER. Without objection, it is so ordered.

#### HELENITA N. STEPHENSON

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of Calendar No. 2160, House bill 9285, for the relief of Helenita N. Stephenson.

The PRESIDING OFFICER. Is there objection?

There being no objection, the bill (H.R. 9285) for the relief of Helenita N. Stephenson was considered, ordered to a third reading, was read the third time, and passed.

Mr. MANSFIELD. Mr. President, in connection with the bill just passed, I ask unanimous consent, on behalf of the Senator from Massachusetts [Mr. SMITH], to have printed in the RECORD at this point a statement prepared by him covering the various aspects of this case.









# Digest of CONGRESSIONAL PROCEEDINGS

OF INTEREST TO THE DEPARTMENT OF AGRICULTURE

OFFICE OF  
BUDGET AND FINANCE

(For information only;  
should not be quoted  
or cited)

Issued Oct. 8, 1962

For actions of Oct. 4, 5, & 6, 1962

87th-2d, Nos. 182 &  
183

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**HIGHLIGHTS:** (Oct. 5) Senate insisted on amendments in disagreement on agricultural appropriation bill. Sen. Russell objected to reporting of supplemental appropriation bill. Sen. Holland inserted Sen. Eastland's article urging that cotton be made more competitive. Sen. Morse commended Land and People Conference in Ore. Senate passed bill to facilitate work of Forest Service. Sen. Morse inserted Secretary Freeman's letter refuting charge of political influence in locating forest fire research laboratories. House agreed to conference report on pay bill. House received conference report on foreign aid appropriation bill. Rep. Pfoff commended ASC county committeemen. (Oct. 6) House agreed to conference report on foreign aid appropriation bill.

## HOUSE - October 4, 1962

1. **RESEARCH.** Rep. Reuss criticized geographic concentration of Federal research grants saying, "... it not only boosts the technological advance of some industries but distorts their natural geographic distribution across the country." pp. 21280-2



2. LEGISLATIVE ACCOMPLISHMENTS. Several Representatives inserted statements on the legislative accomplishments of the 2nd session of the 87th Congress. pp. 21265-7, 21279-80

HOUSE - October 5, 1962

3. PAY BILL. By a vote of 312 to 20, agreed to the conference report on H. R. 7927, the postal increase and pay bill. This bill will now be sent to the President. pp. 21403-15
4. LANDS. Concurred in the Senate amendments to H. R. 7781, to authorize GSA to convey by quitclaim deed a parcel of land in Prince Georges County, Md., to the Silver Hill Voluntary Fire Department and Rescue Squad. The Senate amendments inserted the language of H. R. 11111, to amend the act of October 4, 1961, authorizing the Secretary of Agriculture to sell and convey certain forest lands in Iowa so as to provide that such sale shall be subject to the condition that the property be used for public purposes, and inserted the language of S. 3589, to authorize the Secretary of Agriculture to acquire certain lands in Wright County, Minn. and exchange them with the State of Minnesota for State-owned lands in the Superior National Forest. This bill will now be sent to the President. p. 21422
5. ASC COMMITTEES. Rep. Pfost commended the ASC county committeemen saying, "It is these men I want to salute today and thank them for their efforts in the past which have resulted in the greatest agriculture in the world." p. 21464
6. TRADE FAIRS. Received and agreed to the conference report on S. 3389, to promote foreign commerce through the use of mobile trade fairs (H. Rept. 2538). pp. 21416-7, 21496
7. FOREIGN AID APPROPRIATION BILL, 1963. Received the conference report on this bill, H. R. 13175 (H. Rept. 2540). pp. 21459-60, 21496
8. PUBLIC WORKS. Rep. Saylor objected to a unanimous consent request to appoint conferees on H. R. 13273, the rivers, harbors, and flood control authorization bill. p. 21398
9. GOLDEN EAGLE. Rep. Fisher objected to a unanimous consent request to concur in the Senate amendments to H. J. Res. 489, to provide protection for the golden eagle. p. 21402
10. TRANSPORTATION. Received the conference report on H. R. 5700, to amend the Tariff Act of 1930 to permit contract carriers by motor vehicle to transport bonded merchandise (H. Rept. 2541). pp. 21458, 21496
11. ROADS. Rep. Fallon reviewed the highway legislation enacted in the 87th Congress and inserted a table on the status of improvement of the national system of interstate and defense highways as of June 30, 1962. pp. 21472-4
12. LEGISLATIVE ACCOMPLISHMENTS. Several Representatives discussed the legislative accomplishments of the 2nd session of the 87th Congress. pp. 21460-3, 21469-72
13. LEGISLATIVE PROGRAM. Rep. Albert announced that there will be no legislative business on Mon. and that various conference reports will be considered on Tues. pp. 21463-4



## NEW HAMPSHIRE

John D. Fitzgerald, Plaistow.

## NEW JERSEY

John W. Wright, Cape May Court House.

## NEW MEXICO

Patsy A. Chavez, Navajo Dam.

## NEW YORK

Raymond O. Barker, Hudson Falls.

Edna V. Monica, North Bangor.

Betty M. Tyrrell, Severance.

Dorothy L. Varley, Thomson.

## NORTH CAROLINA

Roy C. Williams, Jr., Angier.

Robert L. Lane, Buttner.

William M. Carver, Durham.

D. Victor Meekins, Manteo.

Rosa J. Vernon, Milton.

Charlie J. Ussery, Norwood.

Edward A. Griffin, Sanford.

## NORTH DAKOTA

Howard W. Pletan, Steele.

## OHIO

Conrad A. Bayer, Cleves.

Wanda M. Keylor, Fairview.

Ellen L. Garner, Jerry City.

Glenn A. Opfer, Lagrange.

Evelyn D. Piccin, Lansing.

Florence M. Pontious, Laurelville.

Jeanne D. Pyles, New Hampshire.

A. Cooper McCauslen, Steubenville.

Victor Videmsek, Willoughby.

## OKLAHOMA

Orville A. Linduff, Drumright.

## OREGON

James R. Landers, Beaverton.

Lawrence J. Armbrust, Creswell.

Phyllis Hill, Detroit.

Sister Joseph Mary Basick, Marylhurst.

George B. McClure, Vale.

Chester T. French, Waldport.

Nathaniel L. Green, Yachats.

## PENNSYLVANIA

Bertram L. Ream, Elizabethtown.

W. LeVerne Wolf, Geigertown.

Ruth M. Rosencrance, Greeley.

Allen G. Gombert, Jr., Parryville.

Vincent E. Schields, Shohola.

## SOUTH CAROLINA

Mary E. Creech, Blackville.

## SOUTH DAKOTA

Donald J. Stransky, Chamberlain.

Irve C. Hanson, Pollock.

## TENNESSEE

Ernest M. Warmbrod, Belvidere.

## TEXAS

William M. Patterson, Ballinger.

Mary S. Sparks, Beckville.

Harbert S. Byers, Celeste.

Mary B. Lee, Charlotte.

Varner Stevens, Childress.

James E. Carpenter, Comanche.

Ernest L. Davis, Dimmitt.

June D. Moye, Donna.

Louise W. McMullen, Keltys.

Lloyd F. Hurt, Kingsbury.

Jerry W. Canaday, Lone Star.

Ralph E. Archer, Lyford.

Roland A. Johnson, McCamey.

Ulman Bruner, Mineola.

William L. Brinkley, Mount Enterprise.

J. Hayes Johnson, Jr., Mount Pleasant.

Spencer O. Beavers, Jr., Maleshoe.

Marvin G. Handrick, Thorndale.

## VIRGINIA

Robert W. Nash, Brodnax.

Kerry P. Sutherland, Grundy.

Garland M. Tyree, Somerset.

William E. Howerton, Stuarts Draft.

Shirley C. Carroll, Swope.

## WASHINGTON

Carrie M. Milne, Thornton.

## WEST VIRGINIA

Evelyn D. Lightner, Cass.

Ronald B. Mills, Mount Storm.

Harold E. Starcher, Ripley.

James W. Michael, Rivesville.

Grady D. Owens, Summit Point.

## WISCONSIN

Ruldolph P. Anich, Ashland.

Joseph T. Kurylo, Hales Corners.

Robert K. Dusek, River Falls.

## WYOMING

Elmer M. Reibeling, Burns.



# House of Representatives

FRIDAY, OCTOBER 5, 1962

The House met at 12 o'clock noon.

The Chaplain, Rev. Bernard Braskamp, D.D., offered the following prayer:

Nahum 1: 7: *The Lord is good, a stronghold in the day of trouble; and He knoweth them that trust in Him.*

Eternal and ever-blessed God, grant that through the attitude and avenue of prayer our life may find focus and its true perspective.

May there be vouchsafed unto us a deeper insight as to its real meaning and a clearer vision that its majesty is revealed when we live nobly and usefully.

We earnestly beseech Thee that the motto, "In God We Trust," which now adorns this Chamber, may strengthen and sustain us when, at times, we feel that the human order is being swept bare of peace and good will.

Kindle within our minds and hearts Thy divine light which can never be eclipsed or extinguished, and that trust in Thee which will supplant all feelings of doubt and despair.

Inspire the Members of Congress to measure up to their obligations and opportunities and be girded with those capacities and resources that will enable them to command and control whatever exigencies and emergencies they may encounter.

Hear us in Christ's name. Amen.

## THE JOURNAL

The Journal of the proceedings of yesterday was read and approved.

## MESSAGE FROM THE SENATE

A message from the Senate by Mr. McGown, one of its clerks, announced that the Senate had passed, with amendments in which the concurrence of the House is requested, a bill and a joint resolution of the House of the following titles:

H.R. 7781. An act to authorize the Administrator of General Services to convey by quitclaim deed a parcel of land in Prince Georges County, Md., to the Silver Hill Voluntary Fire Department and Rescue Squad; and

H.J. Res. 489. Joint resolution to provide protection for the golden eagle.

The message also announced that the Senate had passed bills and a joint resolution of the following titles, in which the concurrence of the House is requested:

S. 2900. An act to provide for the representation of certain defendants in criminal cases in the U.S. district courts;

S. 3024. An act to extend the maximum maturity of Veterans' Administration-guaranteed or insured home loans from 30 to 35 years;

S. 3459. An act to authorize the appoint-

ment of one additional Assistant Secretary of State; and

S.J. Res. 235. Joint resolution to extend the time during which loans for mass transportation facilities may be made under title II of the housing amendments of 1955.

## CORRECTION OF ROLLCALL

Mr. GREEN of Pennsylvania. Mr. Speaker, on rollcall No. 276 I am recorded as not voting. I was present and voted "yea" and ask unanimous consent that the Record and Journal be corrected accordingly.

The SPEAKER. Without objection, it is so ordered.

There was no objection.

## THE UNIVERSITY OF MISSISSIPPI

(Mr. RYAN of New York asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. RYAN of New York. On September 21 I introduced H.R. 13202 which provides that no Federal financial or other assistance may be extended to any educational institution which discriminates against students or prospective students on account of race, religion, color, ancestry, or national origin.

When I introduced this bill I pointed out that the University of Mississippi was receiving \$236,374 for three educational programs alone. The Secretary of Health, Education, and Welfare has said that no further money will go to the University of Mississippi "until the situation is clarified."

This is an important step toward eliminating racial discrimination in education. The University of Mississippi last year received a total of \$3,500,000 in loans and grants from the Federal Government. For too long a time the Nation, through Federal tax funds, has been supporting schools which discriminate. I believe that the administration's action and the passage of H.R. 13202 would be a significant step in affording equality to all our citizens.

## RIVER AND HARBOR AND FLOOD-CONTROL PROJECTS

Mr. DAVIS of Tennessee. Mr. Speaker, I ask unanimous consent to take from the Speaker's table the bill (H.R. 13273) authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes, with Senate amendments thereto, disagree to the amendments of the Senate, and agree to the conference asked by the Senate.

The Clerk read the title of the bill.

The SPEAKER. Is there objection to the request of the gentleman from Tennessee?

Mr. SAYLOR. Mr. Speaker, I object.

## JOHN W. HOLTON

(Mr. ALBERT asked and was given permission to address the House for 1 minute.)

Mr. ALBERT. Mr. Speaker, every Member will agree with me, I am sure, that the fine work of staff members here in the House of Representatives, in its committees, and in the offices of its Members is an indispensable element of the legislative process. These people are the unsung heroes in the business of making laws.

I take this time to advise the House that one of the finest and most capable persons ever to serve the House or any of its Members, John Holton, legislative assistant to the Speaker, is leaving the House of Representatives to accept employment with the American Bankers Association. All of us rejoice that John has been called to employment which will give him opportunities for personal advancement, greater remuneration, and better opportunity to provide for himself and his family. Yet all of us are very sad indeed to be deprived of the benefit of his wise counsel, his efficient service, and his vast knowledge of and experience in the work of this House.

I have had the honor of knowing John and his family for many years. When I was a student at the University of Oklahoma his father was a member of the faculty of the school of religion, which was associated with the university. It was flattering indeed to me when I first came to Capitol Hill to be remembered by John after so many years had gone by. His fine Christian parents gave him that priceless heritage of integrity and character that have characterized all of his fine public service. There is no one in public or private occupation whose moral standards are higher, whose personal conduct is more exemplary, whose devotion to duty and right is more consistent.

There is no one associated with this House in any capacity who has better judgment or greater ability than this fine man. All Members who have been here for a long time know that John Holton was Speaker Rayburn's assistant for many years and that he was widely known in this House as the Speaker's right-hand man.

Having also served Speaker JOHN McCORMACK during this session, John Holton has the unique distinction of having served two great Speakers during his 20 years of work in the House.









# Digest of CONGRESSIONAL PROCEEDINGS

## OF INTEREST TO THE DEPARTMENT OF AGRICULTURE

OFFICE OF  
BUDGET AND FINANCE

(For information only;  
should not be quoted  
or cited)

Issued Oct. 11, 1962

For actions of Oct. 10, 1962

87th-2d, No. 186

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**HIGHLIGHTS:** House rejected Senate USDA appropriation continuation measure. Sens. Russell and Morse criticized House action on USDA appropriation continuation measure. Sen. Proxmire opposed mandatory controls on feed grains. Sen. Humphrey commended administration farm program. Both Houses agreed to conference report on State-Justice-Commerce appropriation bill. House received conference report on roads bill.

### HOUSE

1. **AGRICULTURAL APPROPRIATION BILL, 1963.** By a vote of 245 to 1, agreed to H. Res. 831, "That Senate Joint Resolution 234, making appropriations for the Department of Agriculture and the Farm Credit Administration for the fiscal year 1963, in the opinion of the House, contravenes the first clause of the seventh section of the first article of the Constitution and is an infringement of the privileges of this House, and that the said joint resolution be taken from the Speaker's table and be respectfully returned to the Senate with a message communicating this resolution." pp. 21785-7
2. **ROADS.** Received the conference report on H. R. 12135, the proposed Federal-Aid Highway Act of 1962 (H. Rept. 2549). This bill includes authorizations of \$33,000,000 for the fiscal year 1964 and \$33,000,000 for the fiscal year 1965 for forest highways, and for forest development roads and trails \$10,000,000 additional for 1963, \$70,000,000 for 1964, and \$85,000,000 for 1965.



pp. 21852-3, 21888

3. PUBLIC WORKS. Conferees were appointed on H. R. 13273, the omnibus rivers, harbors, and flood control bill. Senate conferees have ~~not yet~~ been appointed. Earlier agreed to a resolution to send this bill to conference. pp. 21787-802, 21803, 21888  
Rep. Saylor criticized certain provisions of this bill as it passed the Senate. pp. 21824-5
  4. STATE-JUSTICE-COMMERCE APPROPRIATION BILL, 1963. Both Houses agreed to the conference report on this bill, H. R. 12580, and acted on amendments in disagreement. This bill will now be sent to the President. This bill includes \$115,050,000 for the Area Redevelopment Administration, \$3,625,000 for export control, and \$32,000,000 for forest highways. pp. 21757-63, 21803-8
  5. LANDS; EASEMENTS. Concurred in the Senate amendment to H. R. 8355, to authorize executive agencies to grant easements in, over, or upon real property of the U. S. under the control of such agencies. This bill will now be sent to the President. p. 21784
  6. BUILDINGS; CONTRACTS. Rep. Bow objected to a unanimous consent request to send to conference H. R. 11860, to amend the Foreign Service Buildings Act, 1926, to authorize additional appropriations, including agricultural attache housing. p. 21784
  7. PAY BILL. Rep. Johansen criticized the passage of the pay bill. pp. 21802-3
  8. TRANSPORTATION. Agreed to the conference report on H. R. 5700, to amend the Tariff Act of 1930 to permit contract carriers by motor vehicle to transport bonded merchandise. This bill will now be sent to the President. p. 21809
  9. MINING. Began consideration of the conference report on S. 3451, to provide relief for residential occupants of unpatented mining claims upon which valuable improvements have been placed. pp. 21817-20
  10. D. C. APPROPRIATION BILL, 1963. Received the conference report on this bill, H. R. 12276 (H. Rept. 2548). pp. 21851-2, 21888
  11. ELECTRIFICATION. Rep. Pfoest urged enactment of legislation to retain for the Northwest first call on Northwest power. pp. 21869-70
  12. CRANBERRIES. Received from GAO a report on the review of the cranberry indemnity payment program administered by AMS. p. 21888
  13. LEGISLATIVE ACCOMPLISHMENTS. Several Representatives inserted statements on the legislative record of the 87th Congress. pp. 21821-4, 21857-8, 21870-1, 21883-6
  14. LEGISLATIVE PROGRAM. Rep. Albert announced that the conference reports on S. 3451, unpatented mining claims, H. R. 12276, the D.C. appropriation bill, and H. R. 12135, the highway bill, will be considered on Thurs. p. 21820
- SENATE
15. FARM PROGRAM. Sen. Numphrey commended the administration's farm program, reviewed recent improvements in the farm economy, stated that "the agricultural economy of this Nation is in a decided upswing," and inserted a news release of this Department containing a statement of the National Agricultural Advisory



Roosevelt	Shriver	Utt
Roudebush	Sibal	Van Pelt
Rousselot	Siler	Van Zandt
Santangelo	Smith, Calif.	Vinson
Sand	Smith, Miss.	Wallhauser
Schadeberg	Spence	Watts
Scheer	Springer	Weis
Schwengel	Stratton	Whalley
Scott	Sullivan	Williams
Scranton	Teague, Calif.	Wilson, Calif.
Seely-Brown	Thomas	Wilson, Ind.
Shelley	Thompson, La.	Wright
Sheppard	Thompson, N.J.	Yates
Shipley	Thompson, Tex.	Younger
Short	Ullman	Zelenko

So the resolution was agreed to.

The Clerk announced the following pairs:

Mr. Hébert with Mr. Adair.  
 Mr. Wright with Mr. Belcher.  
 Mr. Rivers of Alaska with Mr. Younger.  
 Mr. Gray with Mr. Siler.  
 Mr. Hays with Mr. O'Konski.  
 Mr. Roberts of Alabama with Mr. Martin of Massachusetts.  
 Mr. Anfuso with Mr. Cederberg.  
 Mr. Celler with Mr. Auchincloss.  
 Mr. Carey with Mr. Halleck.  
 Mr. Powell with Mr. Shriver.  
 Mr. Zelenko with Mr. Conte.  
 Mr. Santangelo with Mr. Berry.  
 Mr. Stratton with Mr. Arends.  
 Mr. O'Brien of Illinois with Mr. Mailliard.  
 Mr. Mack with Mr. Kyl.  
 Mr. Hull with Mr. Chamberlain.  
 Mr. Morrison with Mr. Durno.  
 Mr. Thompson of Louisiana with Mr. Wallhauser.  
 Mr. Friedel with Mr. Siball.  
 Mr. Buckley with Mr. Anderson of Illinois.  
 Mr. Doyle with Mr. Derwinski.  
 Mr. Haley with Mr. Fino.  
 Mrs. Sullivan with Mr. Judd.  
 Mr. Roosevelt with Mr. Hoeven.  
 Mr. Rogers of Texas with Mr. Glenn.  
 Mr. Peterson with Mr. Kilburn.  
 Mr. Thompson of New Jersey with Mr. Hoffman of Illinois.  
 Mr. Inouye with Mr. Griffin.  
 Mr. Alexander with Mr. Brown.  
 Mr. Scott with Mr. Schwengel.  
 Mr. Aspinall with Mr. Van Pelt.  
 Mr. Rogers of Colorado with Mr. Fenton.  
 Mr. Evins with Mr. Gavin.  
 Mr. Edmondson with Mr. McIntire.  
 Mr. Donohue with Mr. Harvey of Michigan.  
 Mr. Ullman with Mr. Michel.  
 Mr. George P. Miller with Mr. Laird.  
 Mr. Loser with Mr. Bennett of Michigan.  
 Mr. McDowell with Mr. Schadeberg.  
 Mr. Corman with Mr. Roudebush.  
 Mr. James C. Davis with Mr. Springer.  
 Mr. Philbin with Mr. Curtin.  
 Mr. Johnson of Wisconsin with Mr. Bromwell.  
 Mr. Breeding with Mr. Osmer.  
 Mr. Brewster with Mr. Van Zandt.  
 Mr. Denton with Mr. Short.  
 Mr. Brademas with Mr. Martin of Nebraska.  
 Mr. Dingell with Mr. Hiestand.  
 Mr. Nedzi with Mr. Bell.  
 Mr. Fogarty with Mr. Rousselot.  
 Mr. Gallagher with Mr. Dominick.  
 Mrs. Griffiths with Mr. MacGregor.  
 Mr. Hollifield with Mr. Kearns.  
 Mr. Shelley with Mr. Hall.  
 Mr. Sheppard with Mr. Moorehead of Ohio.  
 Mr. Watts with Mr. Reifel.  
 Mr. Shipley with Mr. Wilson of California.  
 Mr. Magnuson with Mr. Findley.  
 Mr. Baring with Mr. McDonough.  
 Mr. Bailey with Mr. Harvey of Indiana.  
 Mr. Deggs with Mr. Nelsen.  
 Mr. Elliott with Mr. Wilson of Indiana.  
 Mr. Flynt with Mr. Teague of California.  
 Mrs. Green of Oregon with Mr. Robison.  
 Mr. Rains with Mr. Lipscomb.  
 Mr. Reuss with Mr. Utt.  
 Mr. Moss with Mr. Andersen of Minnesota.  
 Mr. Moorhead of Pennsylvania with Mr. McCulloch.

Mr. Morgan with Mr. Smith of California.  
 Mr. Thompson of Texas with Mr. Chipfield.

Mr. Williams with Mrs. Weis.  
 Mr. Karth with Mr. Dooley.  
 Mr. Andrews with Mr. Seely-Brown.  
 Mr. Blatnik with Mr. Scranton.  
 Mr. Burke of Kentucky with Mr. Garland.  
 Mr. Bass of Tennessee with Mr. Curtis of Massachusetts.  
 Mr. John W. Davis with Mr. Scherer.  
 Mr. O'Hara of Michigan with Mr. Mason.  
 Mrs. Riley with Mr. Hoffman of Michigan.  
 Mr. Henderson with Mr. McVey.  
 Mr. Kastenmeier with Mr. Bass of New Hampshire.

Mr. HALLECK. Mr. Speaker, is this an automatic rollcall or is the vote being taken by the yeas and nays?

The SPEAKER pro tempore (Mr. ALBERT). The yeas and nays.

Mr. HALLECK. I cannot qualify, Mr. Speaker. If I had been present I would have voted "aye."

The result of the vote was announced as above recorded.

A motion to reconsider was laid on the table.

## PUBLIC WORKS APPROPRIATIONS

1962

Mr. SMITH of Virginia, from the Committee on Rules, reported the privileged resolution (H. Res. 832, Rept. No. 2547) which was referred to the House Calendar and ordered to be printed.

Mr. SMITH of Virginia. Mr. Speaker, I call up the resolution just reported (H. Res. 832) and ask for its immediate consideration.

The Clerk read the resolution, as follows:

*Resolved*, That immediately upon the adoption of this resolution the bill (H.R. 13273) authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes, with the Senate amendment thereto, be, and the same hereby is, taken from the Speaker's table, to the end that the Senate amendment be, and the same is hereby, disagreed to and that the conference requested by the Senate on the disagreeing votes to the two Houses be, and the same is hereby, agreed to.

The SPEAKER pro tempore (Mr. ALBERT). The question is, Will the House consider the resolution (H. Res. 832)?

The question was taken; and two-thirds having voted in the affirmative, the House agreed to consider the resolution.

The SPEAKER pro tempore. The Chair recognizes the gentleman from Virginia [Mr. SMITH].

Mr. SMITH of Virginia. Mr. Speaker, I yield 30 minutes to the gentleman from Kansas [Mr. AVERY] and now yield myself such time as I may consume.

Mr. Speaker, this resolution which we are about to consider is to send to conference between the House and Senate the public works omnibus bill. There has been, and perhaps will continue to be considerable controversy about the measure, and I think it is necessary to make a brief statement about it.

You will recall that when the House had before it the so-called \$900 million public works acceleration authorization bill, it was pretty generally understood

that if that bill was passed, there would be no general omnibus bill this year. After that bill was passed, something happened—I do not know what—but the Committee on Public Works began consideration of an omnibus bill. They held hearings. They went through the usual course and performed their function, which was entirely legitimate and proper that they should do. The bill was presented to the House, and after thorough consideration, it was adopted by the House and sent to the other body for concurrence by that body. It remained there for a short time and was then passed with amendments.

The bill, as it left the House, carried something like \$2¼ billion of authorizations. The other body adopted some 50 additional projects that had not been considered by the House and were not in the House bill. When I say that the additional projects were not considered by the House, there is one exception to that because in the House bill was what is known as the very controversial Burns Creek item. The House by a rollcall vote and a substantial majority rejected that item and struck it from the bill. The other body reinserted it in the bill by amendment. As I said, there were something like 50 new projects adopted in the other body. The bill came back here and there was an objection raised to sending the bill to conference.

There were something like 50 additional projects inserted in the bill without any consideration on the part of the House involving authorizations of something like—there is a difference in the figures, because I took them all and added them up on an adding machine in my office, and my adding machine was not big enough to carry these figures, so I had to send out and have it done elsewhere—my estimate came to \$1,700 million of authorized expenditures that the House had not considered, many of them the Budget had not even considered, many of them had not been approved by the Corps of Engineers. Over that arose this controversy, which has been pretty hot.

I would like to digress for a moment on a parliamentary question of the rules of the House. We have some rules in the House, and some of them are pretty specific and they are written in pretty plain, clear English that he who runs may read. We have a rule known as rule XX which provides that any amendment of the Senate placed on a House bill, if it should have been considered under the rules of the House in the Committee of the Whole, that involve appropriations or tax, if it had not arisen in the House and was required under the rules of the House to be considered in the Committee of the Whole House, that it shall be subject to a point of order when it comes back to the House.

This is a perfect illustration of that rule. There were some differences over it. Anyway when they asked for this conference there was objection, and it went to the Rules Committee, and many Members of the House appeared before the Rules Committee pro and con on the bill.



While it may not be considered by some as the function of the Rules Committee to consider the merits of legislation, that is a matter, of course, of great controversy and difference of opinion around here. It has been said that the Rules Committee is merely a traffic cop, and I was criticized for considering it as something else. My reply was that I was not elected to Congress by my people to be a traffic cop; and as long as I have anything to do with it I expect to exercise my functions as a Member of this Congress. But under the peculiar circumstances the committee did hold extended hearings. They lasted from 10:30 yesterday morning until 4 something yesterday afternoon, in which any number of Members of Congress came before the committee to testify in this matter of having forced upon them projects that concerned them not only without consideration in the Committee of the Whole House but also without any consideration at all by anybody else in the House.

Some of us thought that was not the way to run this Congress. Some of us think that we have certain obligations to be somewhat cautious, and to exercise some responsibility about the authorizations and appropriations we make around here. So that led to this controversy, and we had, as I stated, any number of Members of Congress who came and protested against some of these amendments made in the other body.

The evidence was so clear that some of these projects should not be in this bill at the present time without consideration by the House that we had some discussion with the House conferees and the House leadership. I think, and I have reason to hope and expect, when this bill goes back to conference the House conferees are going to stand upon these matters that should not have been in this bill and that everybody knows they should not be in the bill. That is about all I can say on the matter.

All the information we have upon which to consider these Senate amendments—is a conference print, and that, with the amendments put on by the other body comes to 90 pages. I knew this matter was coming up, so I had an opportunity to go to the country over the weekend and spend a couple of days trying to find out what it was all about. I think I know a little bit about the matter. But no one can comprehend all of these projects and their merits in the short time and on the small amount of information we have.

I will conclude my statement by saying that I devoutly and sincerely hope and expect that the conferees are going to stand by the House bill and not indulge in this type of irresponsible legislation.

Mr. SAYLOR. Mr. Speaker, will the gentleman yield?

Mr. SMITH of Virginia. I yield to the gentleman from Pennsylvania.

Mr. SAYLOR. I want to commend the chairman of the Rules Committee, first for having the meeting yesterday and considering this bill. I was the one who objected to the bill going to conference because of the fact that these

projects which have been referred to by the chairman of the Rules Committee were included by the other body, and unless we had an opportunity to go before the Rules Committee there would have been no opportunity for the Members of this House to voice their objection. With the understanding that has been agreed to, I am in favor of this bill going to conference.

Mr. SMITH of Virginia. The gentleman did appear before the committee and disclosed to the committee that certain items placed in this bill had not been considered in the House but had been taken from the committee which has jurisdiction, which is his Committee on Interior and Insular Affairs, that were taken over by the Committee on Public Works of the other body.

Mr. AVERY. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I do not think we need to long belabor the debate on this resolution. The gentleman from Virginia [Mr. SMITH] has pointed out the principal issues that made House action necessary to send this bill to conference.

I have some comment to make in addition to the point brought out by the gentleman from Virginia [Mr. SMITH].

In the first place, I would like to ask a question and of course this question cannot be answered. If anybody wants to answer it, I will be glad to have it for the RECORD. I wonder why we are considering a public works authorization here not in the closing weeks, or not in the closing days, but in the closing hours of a session of Congress that has been going on for 2 years. I do not believe hearings were held on this so-called omnibus public works bill for 1963 until sometime in September. And here we are trying to compress an orderly procedure, possibly authorizing the expenditure of over \$3 billion, into a few days of legislative procedure, when a substantial number of Members are not able to be present.

I consider that to be very poor management on the part of the majority, and I do not think it can be defended. If there is any defense for such procedure, I would welcome any Member of the majority stating their justification for this unwarranted delay.

Mr. Speaker, in respect to the additions that were placed in this bill by the other body, as the gentleman from Virginia told us—and I think it may be repeated later—there ostensibly has been an addition of about \$1.5 billion in projects added by the other body.

Mr. Speaker, the minority reported in the Rules Committee yesterday that this was not a realistic figure; that actually there was half a billion dollars in addition to that amount, although it is not spelled out in this bill. There are commitments in this bill that will have to—the end result of an addition by the other body of almost \$2 billion rather than \$1.5 billion set out in the Senate amendment. So, after all, we are talking about or we may be talking about a \$4 billion commitment. Yet here we are debating it in the floor of the House with 248 Members answering to a quorum call and about 240 of those Members would like to be home.

Mr. Speaker, I do not think this is responsible procedure. But, of course, this is a bill in which nearly half of the Members of the House have very deep and sincere interests. Of course, it also has political repercussions.

Mr. Speaker, it has been frequently referred to by our friends in the press as a pork-barrel bill. That may be right. However, be that right or be it wrong is beside the point.

This is a bill that authorizes public works that are of vital concern to the economy of every State in the Union and many cities are directly or indirectly affected by projects contained in this bill. So, from a realistic standpoint, it is necessarily going to attract a considerable amount of attention from all the States in the Union and congressional action can be anticipated and expected.

Now, Mr. Speaker, one final point: I would like to break these Senate amendments down into four categories. If the conference report comes back to the House, I would hope at least that these categories will be established by the conferees and that the projects which remain in the conference report will fall into only one of the categories and final judgment will be placed on this basis:

First, there are projects in this bill that have been approved by the Bureau of the Budget and which are not controversial. The informal judgment of the Rules Committee seemed to be yesterday that there would not be substantial objection to this category of projects that was added by the other body. May I repeat that: Projects that have been approved by the Bureau of the Budget and which are not controversial—and I shall not attempt to suggest what number of projects may be in that particular context.

The second category involves projects that have been approved by the Bureau of the Budget and are controversial. There are some of these projects which are controversial even as between House Members from the same State. As the gentleman from Virginia [Mr. SMITH] told us just a moment ago, these Members resent, if you please—and I think that is the right word—that they were not afforded an opportunity even to be heard on these projects that are in the bill which are located in their districts and to which they are opposed.

Of course, the third category involves projects that are not approved by the Bureau of the Budget and are controversial.

Mr. Speaker, it was my understanding in the Rules Committee that the House conferees would reject all the projects that have not been approved by the Bureau of the Budget and which are controversial, particularly those opposed by House Members.

Then there is the fourth separate category, as stated by the gentleman from Pennsylvania [Mr. SAYLOR] that includes projects clearly beyond the jurisdiction of the Committee on Public Works, and contained in this bill.

I should hope, Mr. Speaker, that the conferees will object to those projects as well.

Mr. Speaker, I yield 5 minutes to the gentleman from Florida [Mr. CRAMER].



(Mr. CRAMER asked and was given permission to revise and extend his remarks.)

Mr. CRAMER. Mr. Speaker, I take this time mainly for the purpose of trying to put in focus a few things that I think the membership of the House are entitled to know. No. 1: I intend to vote to send this bill to conference. I expect to be the ranking Republican conferee. I have full confidence that we will be able to bring back a clean and a good bill. I have high hopes of that. I will say that it has been my consistent position and it has been the consistent position of the minority that when a bill of this magnitude on public works authorizations, for the first time since I have had the pleasure of being a member of that committee, in 8 years, comes before this body at this late hour and is considered by our committee under specific ground rules that do not permit even Members of the House to be heard, let alone interested citizens of this country, in the proper democratic fashion to present their views on matters many of which are extremely controversial, that we should live by specific ground rules in order to preserve the integrity not only of our committee but of this House of Representatives and the Congress of the United States, to preserve the integrity of our committee and to assure the taxpayers that we are protecting their interests in this public works bill. So my views in the conference will be the same as they have been on the floor of this House consistently since I have been a Member, and in particular the manner in which this bill has been handled in the last days of the session, to make certain that controversial projects on which people have asked to be heard, in the true democratic tradition of America, that they be given the opportunity to be heard. I, in good conscience, could not vote for projects on which American citizens have asked to be heard, who have been denied that opportunity; and on which even my own colleagues, representing their districts, have been denied an opportunity to be heard.

In good conscience and in protecting the taxpayers of the country I could not possibly vote to return them to this House as part of the conference report.

Likewise, these projects having not been heard, I could not vote to bring projects in that have not been properly cleared by the proper departments and without hearings.

I hope we can bring back a clean bill and that in so doing we shall help to speed the adjournment of this House.

Mr. Speaker, there are many good and sound projects in this bill.

It is most unfortunate that the good ones, which are in the vast majority in the bill, are jeopardized by the action of the other body in putting in \$1.4 billion in excess of the House bill, and that does not include the additional \$400 million, if you take into consideration the true cost of the Columbia Basin projects and other multiple-purpose projects, rather than the amounts referred to in the bill that were put in without hearings.

Let me give you an example of what the other body did. On page 37 of the bill there is a certain project in Oklahoma, the Arkansas River project, between the Arkansas River and Muskogee, Okla., where they authorize a study of the project. And in the same bill—and this illustrates the irresponsibility of the manner in which this bill was handled, and why I feel it is essential, if we go to conference that we bring responsibility back to the bill—they say, "There is hereby authorized"—we do not even know what the cost is, what the project is—are hereby authorized and determined to be feasible and justified by the Chief of Engineers on approval of the President, unless within the period of the first 60 calendar days of the meeting of the 1st session of the 88th Congress such report is disapproved by the Congress.

This is a "gimmick" that the House Committee on Public Works refused to accept on other projects, which would not only provide for a survey but automatic authorization, not even knowing what the survey results are.

The other body passed a bill of \$3.7 billion, the House \$2.3 billion. I intend to stand by the House position in striking out the Burns Creek project because hearings are justified and should be had. The Knowles Dam was added at a cost of \$258 million; the Bruces Eddy Dam at a cost of \$186 million; Burns Creek at a cost of \$52 million; and Trotters Shoals, \$78 million. This is just to give you four examples.

Most of those are in the Columbia River Basin, and add some \$326 million to this bill.

I have confidence that these projects will be sound and we will have a good bill when we bring it back.

One other thought, referring to the remarks of the gentleman from Kansas: Why is this bill here so late? For 6 months the Committee on Public Works spent the time of that committee trying to justify the \$900 million boondoggle public works so-called acceleration program, on which we are going to have some discussion later. Four hundred million dollars is already in the appropriation bill which we are going to be considering on this program, which permits the President to pinpoint projects without proper consideration by the Congress on specific projects. I am going to bring out that it does not indicate what projects are involved, and they are asking for a \$400 million blank check.

Instead of voting for a proper bill, our committee spent most of the time trying to work on the \$900 million bill and the \$2 billion standby authority requested to be financed out of any unexpended balance. That is why we have this bill here at the last minute of the Congress. That is why it is jeopardized, and it should not be. It is unfortunate that these good projects and most of them were handled through the proper authorizations of the Congress, are being jeopardized at this late date for a lot of much less justified projects.

Mr. AVERY. Mr. Speaker, I yield 3 minutes to the gentleman from California [Mr. BALDWIN].

Mr. BALDWIN. Mr. Speaker, I feel that the House Committee on Public Works and those Members that may serve on the committee of conference on this bill have an obligation to the Members of this House in case of the controversial projects that may have been added by the other body to make sure that those projects are deferred until there is an opportunity for the Members of the House interested in those projects to be heard and to make sure also that any constituents of those Members who desire to be heard are given that opportunity. It seems to me we have to take this position to protect the integrity of the House. This bill is of substantial magnitude. It involves projects in almost all the States of the Union. When there are Members in whose districts projects may be built who have not been given an opportunity to be heard by the committee of the House handling the bill, it seems to me it is most essential that we defer those projects until the Members have an opportunity to be heard, which is the position I am going to take in the committee of conference. I think it is the only proper position we can take to protect the integrity of the House and the right of the individual Members of the House to have a hearing and have their constituents have the opportunity to be heard before a decision is made on such projects.

(Mr. DORN asked and was given permission to extend his remarks at this point in the RECORD.)

Mr. DORN (his own manuscript). Mr. Speaker, I want to commend the gentleman from Virginia, Judge SMITH, for his forthright, straightforward, and honest stand here today, as always, for the taxpayers of the United States and for justice and fairness. I want it clearly understood that I advocate this rule permitting the omnibus rivers and harbors bill to go to conference. I appeared before the Rules Committee yesterday asking for this rule; however, I want to make it crystal clear that I am in complete agreement with the gentleman from Virginia, Judge SMITH, that every single project which has not cleared the Bureau of the Budget and which has not been heard by the Congress should be postponed until all parties can be heard.

It is incredible that projects authorizing more than a billion dollars have been added to this bill, Mr. Speaker, in many cases without consultation—without even notice to the Members of the House most affected. I can say without contradiction that the only time that I have had the opportunity to mention Trotters Shoals before a congressional committee was when the gentleman from Virginia, Judge SMITH, gave me permission to appear yesterday before his great Rules Committee. The gentleman from Virginia, Judge SMITH, I am grateful to you, sir, for your unquestioned integrity, for your fairness, and your willingness to permit all of us to be heard and to speak for our people.

I know the Speaker will appoint stalwart conferees who will stand by the traditions and principles of this House. This House is not the lower body. It is



the body closest to the American people and foremost in the eyes of the American people. This House is taking the lead in protecting the American people from ruthless pressure groups and unbridled bureaucracy. With the budget unbalanced, with the national debt \$300.8 billion, it is unbelievable that literally billions are added to this bill without hearings, consultation, and without adequate reports on their feasibility.

Mr. Speaker, when I say I am for free enterprise and that I detest socialism, I can truthfully say that I practice what I preach. I do not want to advocate on one hand a balanced budget, reduction of the national debt, a sound dollar and then on the other hand run to Washington with my hat in my hand begging for the taxpayers' money for my own district. I want Trotters Shoals to be heard by all parties concerned. If it can be proven feasible and beneficial, I will be for it. I do not want it railroaded through and my people "sandbagged" without Mead, the Seaboard Railroad, Bigelow-Sanford, and countless others being heard.

I believe the conferees will do the fair thing and postpone Trotters Shoals until early next year. I believe, too, Mr. Speaker, that the distinguished and able leaders of the South and the Nation in the other body will in the end be fair and just to my people and to me personally. I truly believe they will postpone Trotters Shoals till all can be heard.

I plead with them to permit Duke to go ahead now as they must have authorization this session. Duke is beyond controversy. No one has opposed Duke—not openly. There is no argument against Duke. Duke must begin the preliminary stages of its project early next year. We passed the Duke bill in the House without controversy. On its merit it should receive the same consideration elsewhere.

Mr. SMITH of Virginia. Mr. Speaker, I yield 1 minute to the gentleman from Pennsylvania [Mr. FLOOD].

(Mr. FLOOD asked and was given permission to proceed out of order.)

Mr. FLOOD. Mr. Speaker, I realize that the Members here are statesmen, not politicians, but in case they are interested in elections, here is how to run a railroad. This is a dispatch from North Korea:

North Korea's Communist regime today claimed a perfect record in the election of members of the new National Assembly.

The Korean central news agency said in a dispatch from Pyongyang that 100 percent of the voters registered in the 383 constituencies voted Monday and "100 percent of the electors cast their votes for the candidate deputies."

The Korean Communist Party had named one slate of candidates, and there were no contested races.

Mr. SMITH of Virginia. Mr. Speaker, I yield 1 minute to the gentleman from Oklahoma [Mr. WICKERSHAM].

Mr. WICKERSHAM. Mr. Speaker, inadvertently a committee clerk yesterday evidently informed the Evening Star there was one project, in conference, the Waurika project, that did not have the approval of the Bureau of the Budget or the U.S. Corps of Engineers. This is not

the case. This project was included in the Senate bill. It was given a hearing and favorably reported in the other body by the Senate Committee on Public Works. It does have the approval of the Bureau of the Budget as well as the approval of the U.S. Engineers, and it was heard by the House Committee on Interior and Insular Affairs. Previously, it was heard by the Senate Committee on Interior and Insular Affairs and reported favorably by said committee and by the other body.

I have conferred with the House conferees about this bill, urging favorable consideration, I do hope and trust that this project, known as the "Waurika project," will be left in this bill. It is most important to 400 members of Waurika families who have been run out of that area three times in recent months by heavy floods. It is a very worthwhile project. Furthermore, it is essential to several cities as a source of needy water supplies.

I hope the conferees will agree to allow this worthy project to remain in the omnibus public works bill.

Mr. AVERY. Mr. Speaker, I yield 1 minute to the gentleman from Missouri [Mr. CURTIS].

Mr. CURTIS of Missouri. Mr. Speaker, I was very interested in the statements of the members of the Committee on Public Works on this side of the aisle who will be conferees on this matter. But, we have not heard from anyone from the other side, from the conferees on the other side. I wonder if their opinion is the same as that expressed here; and as other Members have expressed the importance of abiding by this procedure. Can anyone enlighten me? Will someone from the Committee on Public Works make a statement from the majority side of the aisle?

Mr. DAVIS of Tennessee. Mr. Speaker, will the gentleman yield?

Mr. CURTIS of Missouri. I yield to the gentleman.

Mr. DAVIS of Tennessee. The conferees on the majority side are in substantial agreement with the statements made by the two gentlemen on your side.

Mr. CURTIS of Missouri. I thank the gentleman from Tennessee very much and appreciate it.

Mr. SMITH of Virginia. Mr. Speaker, I yield to the gentleman from Montana [Mr. OLSEN].

Mr. OLSEN. Mr. Speaker, on September 22, 1960, in my home State of Montana, the now President John F. Kennedy was speaking of the Knowles project which is the subject of my remarks today. President Kennedy said:

We will not stand by and permit our resources to be wasted or taken for partial development for the benefit of special interests. We will not stand by, for example, and permit another Hells Canyon blunder in the Clark Fork Basin. I think the next President of the United States must support early authorization of the multipurpose project in the Paradise Knowles area.

The Senate held extensive hearings on the Knowles Dam project, in Montana over a period of years on several occasions, and finally this year in the Public Works Committee of the Senate. Every-

one who had any interest in the project was heard. Thus the Senate included Knowles in that body's public works program. When news reached Montana of the inclusion of this project in the proposed public works bill of 1963, telegrams commenced to arrive at my office. In the last 4 days, I have received over 200 in favor of the project and none against.

As Senator MANSFIELD said a few days ago, and as I have been quoted, as well as Senator METCALF earlier this year, we support Federal investment in Knowles Dam with three specifications:

First. A reservation of power for Montana.

Second. Substantial compensation to the Indians—it could be a block of power.

Third. Continue the guarantee of present elevation of Flathead Lake.

For many years, I have supported the policy of Montana water for Montana people and the development of Montana resources first for the benefit of Montana people; and, of course, for the benefit of everyone in the Nation.

Water is committed to running downhill. Therefore, to benefit Montana people, the water must be developed before it gets out of the State. Since time began, excess runoff of water from Montana has been going to the seas undeveloped. The run of the river dams developed by private power companies have permitted a great waste of water by failure to corral the floodwaters. The people of Montana and the Nation are entitled to full development of the river—electric power, irrigation and reclamation, flood control, and recreation. Private power companies are organized for the profit of their stockholders—in the case of Montana, about 80 percent of the stock is held outside the State. Private power companies are not organized for and do not control floodwaters, develop recreation, or irrigation and reclamation, or any of the other benefits of a great river such as the Clarks Fork of the Columbia River or the Flathead River. We must commit ourselves to the development of the whole river, complete development, in cooperation with the whole basin of the river. For instance, Hungry Horse Dam as an isolated operation would produce only 90,000 kilowatts of power.

However, the at-site power of Hungry Horse under a coordinated operation with other Federal dams on the Columbia River produces 221,000 kilowatts, plus downstream generation of 862,000 kilowatts from the reuse of Hungry Horse storage; that is a grand total of more than 1 million kilowatts. Knowles Dam; under coordinated operation, will develop 267,000 kilowatts at-site plus an additional 686,000 kilowatts downstream from reuse of Knowles storage; or a total of almost 1 million kilowatts. This should be compared with the rated possible production at Buffalo Rapids of 148,000 kilowatts, by the Flathead Indian Tribe or the Montana Power Co. because it would be only a run of the river dam and has no storage capabilities whatsoever. Knowles is the wiser choice of these possible developments at this reach of the river. These facts and con-



clusions are those made after 11 years of study by the Corps of Engineers of the U.S. Army; and these conclusions have been approved and the recommendation of the Corps of Engineers has been concurred in by the Board of Rivers and Harbors, the Secretaries of the Army and Interior, the Bureau of the Budget, and the President. The Knowles project would pay for itself in 50 years on a cost-benefit ratio of 1.2 to 1. The benefits of more than \$200 per acre from the 50,000 surface acres of the stored water are compared with the benefits from each of the 8,600 acres of tillable inundated lands with a gross acre revenue of less than \$44. Knowles will irrigate more than 21,000 acres. Additionally, Knowles would be beneficial to Montana:

First. Cheap power inviting job-making industry to Montana at Bonneville Postage Stamp—rate of 2.4 mills instead of private power rate of 6 mills per kilowatt.

Second. Montana obtains its rightful share of National Government investment in natural resource development.

Third. Increase in broadened tax base of local government with new industry, new families, and new homes.

Fourth. Greatly enhance fish and wildlife resources.

Fifth. Boost Montana recreation and tourist industry.

Mr. Speaker, I urge the conferees to accept the Senate amendment, the the Knowles project, in the public works bill.

Mr. Speaker, I include as part of my remarks the more than 200 telegrams which I hold in my hand and submit for the RECORD:

HELENA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Our organization strongly urge you to carry on fight for Knowles Dam. Our organization of 20,000 members on record by convention action in full support of Knowles Dam.

JAMES S. UMBER,  
President, Montana State AFL-CIO.

HAMILTON, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Trust you won't be influenced by Montana Power Co. opposition to Knowles Dam.

Brandy,  
G. M. BRANDBORG.

MISSOULA, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

From information I have gathered I earnestly feel that the majority of western Montana citizens favor the construction of Knowles Dam.

GEHRES D. WEED,  
Architect, Paddock Building.

MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Strongly urge inclusion of Knowles Dam project in omnibus public works bill.

J. R. RILEY,  
County Attorney Office.

MISSOULA, MONT.,  
October 6, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support Knowles Dam bill passage.  
WILLIAM L. CLOSE.

MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

Urge you to support Knowles Dam.  
Mr. and Mrs. R. M. HOUGHTON.

MISSOULA, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

I expect you to give Knowles Dam your fullest support.

ANNE R. RINKE.

MISSOULA, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
Washington, D.C.:

Strongly urge inclusion of Knowles Dam; cannot afford underdevelopment by private power against Russian competition.

EDNA MANN.

MISSOULA, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
Member of Congress,  
House Office Building,  
Washington, D.C.:

The people of western Montana are positively not opposed to Knowles. They overwhelmingly favor it. The economic dislocation is trifling compared to the economic gains to be derived. It is projects such as this which make prosperous areas out of existing rock reefs and sagebrush.

DONALD A. PADDOCK,  
Attorney at Law.

MISSOULA, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

We urge passage of Knowles Dam.  
ARLEN and JAQUETTA THOMPSON.

MISSOULA, MONT.,  
October 6, 1962.

Hon. ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We urge that Knowles authorization be added to House bill before adjournment.

LEON and ESTHER HURTT.

MISSOULA, MONT.,  
October 6, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Use your most persuasive arguments to secure Knowles for Montana.

LA VERNE TAYLOR.

MISSOULA, MONT.,  
October 6, 1962.

ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

Urge committee to retain Knowles Dam in public works bill.

ELTON and BERNICE BRECHBILL.

MISSOULA, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

We fully support the Knowles Dam. Pay no attention to the threat of the American Crystal Sugar Co. We have more beet land available on our ranch than the whole Moise

Valley. At \$10.8788 per ton no return anyhow. We're a hundred percent behind you on this bill.

ELMER and MARY FLYNN.

MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

I favor Knowles Dam.

LORENE LORAN.

BUTTE, MONT.,  
October 8, 1962.

Hon. ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

ARNOLD fight for Knowles Dam.

GEO. BLAIR,  
Secretary, Boilermakers Union No. 30.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Please support Knowles Dam bill this session of Congress.

DALE WARREN.

SWAN LAKE, MONT.

ST. IGNATIUS, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We're for Knowles this session of Congress.

DENNIS R. PLOUFFE.  
MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Vote for Knowles Dam during this session of Congress.

GUS PIENIAK.

ST. IGNATIUS.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

We sincerely hope Knowles Dam will be included in bill this session.

MARGARET and HERBERT CARSON.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington D.C.:

We're for Knowles this session of Congress.

Mr. and Mrs. FRED MILES.

ST. IGNATIUS, MONT.

ST. IGNATIUS, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Vote for Knowles Dam this session of Congress.

Mr. and Mrs. L. E. DUNN.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Vote for Knowles Dam this session.

Mr. and Mrs. DAN MCCOLLUM.

ST. IGNATIUS, MONT.

ST. IGNATIUS, MONT., October 7, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We want Knowles Dam authorized soon.  
HAROLD MITCHELL, JR.



MISSOULA, MONT.  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
We're for Knowles Dam this session of Congress.

L. H. KROGSTAD.

RONAN, MONT.

MISSOULA, MONT.  
October 5, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
I support Knowles Dam bill passage.  
MELVIN SHUFFIELDS.

MISSOULA, MONT.,  
October 8, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
I support Knowles Dam because I feel it will benefit the entire Northwest.

MRS. GEORGE WELLS.

HOT SPRINGS.

MISSOULA, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Believe Knowles Dam project in best interest of Montana business. Urge your support.

K. G. DISTRIBUTORS.

MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Believe Knowles project in best interest of Montana, Northwest and Nation. Strongly urge authorization.

EUGENE PIKE.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
We are for Knowles this session of Congress.

Mr. and Mrs. MELVIN BROWN.

ST. IGNATIUS MONT.

MISSOULA, MONT.,  
October 8, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
We are for Knowles this session of Congress.

Mr. and Mrs. CHARLES R. CORDIER.

POLSON MONT.

MISSOULA, MONT.,  
October 8, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
I support Knowles Dam because of its many benefits for all this area.

Mr. GEORGE WELLS.

HOT SPRINGS.

ST. IGNATIUS, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
We're for Knowles this session of Congress.

ROSALIE P. MATT.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
We're for Knowles this session of Congress.

WALTER RUDD.

ST. IGNATIUS, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
We're for Knowles this session of Congress.  
Mr. and Mrs. CLIFFORD A. MATT.

MISSOULA, MONT.,  
October 8, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Montana needs industry. We need cheap power from Knowles to attract it. Urge authorization.

GEORGE W. EVINS,  
AGNES E. EVINS.

ST. IGNATIUS, MONT., October 7, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
We want Knowles Dam for western Montana progress.

RICHARD V. ORR.

ST. IGNATIUS, MONT., October 7, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Support Knowles Dam this session. Montana needs this project.

Mr. and Mrs. ARCHIE W. OLSEN.

ST. IGNATIUS, MONT.,  
October 7, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
People strong for Knowles Dam this session.

Mr. and Mrs. VALENTINE M. SCHELER.

ST. IGNATIUS, MONT.,  
October 7, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Montana needs Knowles Dam. Hope it is authorized this session.

Mr. and Mrs. MICHEL ASHLEY.

ST. IGNATIUS, MONT.,  
October 7, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Urge support of Knowles Dam for western Montana.

Mr. and Mrs. RAY ORR.

ST. IGNATIUS, MONT.,  
October 7, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
People want Knowles Dam this session.

Mr. and Mrs. PARLEY A. KENT.

ST. IGNATIUS, MONT.,  
October 7, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Community wants Knowles Dam authorized for western Montana.

JOHN C. BROCK.

BUTTE, MONT.,  
October 7, 1962.

ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:  
Consensus heavily in favor of your staying in Washington to vote on public works appropriations and other vital legislation. Recognize you have tough campaign. Offer any assistance possible.

MARY and SARAH McNEELIS.

ST. IGNATIUS, MONT.,  
October 7, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Appreciate support of Knowles Dam for western Montana.

JAMES S. MORAN.

ST. IGNATIUS, MONT.,  
October 7, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Request your support of Knowles Dam.

MARY HOPPE.

ST. IGNATIUS, MONT.,  
October 7, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Everyone here strong for Knowles. Try to keep it on bill.

JIM MCCOLLUM.

ST. IGNATIUS, MONT.,  
October 7, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Want Knowles Dam authorized before adjournment.

S. SMESRUD.

ST. IGNATIUS, MONT.,  
October 7, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Community urges your support of Knowles Dam.

Mr. and Mrs. LOYAL LESTER.

ST. IGNATIUS, MONT.,  
October 7, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Request all possible support by you for Knowles Dam. Montana needs this project.

Mr. and Mrs. CHARLES HUNTER.

ST. IGNATIUS, MONT.,  
October 7, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Hope for Knowles Dam authorization soon.

Mr. and Mrs. JOHN A. MICHEL.

HOT SPRINGS, MONT.,  
October 7, 1962.

HON. ARNOLD OLSEN,  
Washington, D.C.:  
I believe Knowles Dam would be a great asset to northwestern Montana.

TOM JACKQUES.

HOT SPRINGS, MONT.,  
October 7, 1962.

HON. ARNOLD OLSEN,  
Washington, D.C.:  
I think Knowles Dam is essential to the economy of the entire Northwest.

ALMA CARNEY.



HOT SPRINGS, MONT.,  
October 8, 1962.

HON. ARNOLD H. OLSEN,  
Washington, D.C.:

I support Knowles Dam because I think it is good for the future of Montana.

Mrs. EDGAR STEVENS.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We're for Knowles this session of Congress.

ART WARREN.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Please vote "Yes" on bill for Knowles Dam.

CECIL G. CRUSCH.

ST. IGNATIUS, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We're for the Knowles Dam.

Mr. and Mrs. D. D. WERNER.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Vote for the passage of the Knowles Dam this week.

Mrs. VERNE HARRIS.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Knowles Dam a must. Do all you can November 6 will take care of itself.

Mr. and Mrs. DON WALDRON.

ST. IGNATIUS, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Vote for Knowles Dam. We're for it.

BEN and BESSIE DORMAIER.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Vote "yes" for the Knowles Dam bill.

Mr. and Mrs. CLARENCE JENSEN.

ST. IGNATIUS, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We're for Knowles Dam this session of Congress.

H. R. RESNER.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We're for the Knowles Dam bill.

Mr. and Mrs. MELVIN LUND.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We're for Knowles Dam. Please vote "Yes."

Mr. and Mrs. LAWRENCE CHRISTENSEN.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Please support the Knowles Dam bill.

EMANUEL BELLON.

MISSOULA, MONT.,  
October 8, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We're for Knowles this session of Congress.

Mr. and Mrs. LEO ROUILLIER.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Vote for Knowles this session of Congress.

Mr. and Mrs. DERALD DELLWO.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We're for Knowles Dam this session of Congress.

Mr. and Mrs. TED COMPTON.

MISSOULA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support the Knowles Dam bill. Please vote "yes."

HAROLD G. TEIGEN.

ST. IGNATIUS, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Vote for Knowles Dam this session of Congress.

JESS ROGERS.

MISSOULA, MONT.,  
October 8, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Opposed to Knowles Dam along with majority voters Lakes County.

Mr. and Mrs. W. D. MCDANIEL.

MISSOULA, MONT.,  
October 6, 1962.

HON. ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Vote for Knowles Dam bill. Montana needs additional power for existing and new industry to help stabilize economy. New water facilities to boost tourism. Added flood control a must for Columbia Basin.

GEROGIA WALTER.

MISSOULA, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Strongly urge inclusion of Knowles Dam project in omnibus public works bill.

JACK PINSONAULT,  
County Attorney.

KALISPELL, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We appreciate your help in retaining the Knowles project on the public works bill.

ELMER BASTROM.

KALISPELL, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We feel what you are doing for the Knowles project is great. Knowles must stay on the PWB.

BOB WILZ.

KALISPELL, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Knowles project must stay on the PWB. Anything you can do is appreciated.

ORVILLE RIYZEMAN.

KALISPELL, MONT.,  
October 6, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Your efforts in keeping the Knowles project on the public works bill are more than appreciated. We stand behind you.

JOE CROSSWHITE.

KALISPELL, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

The Kalispell Central Trades & Labor Council has unanimously supported the Knowles project. Please do all that is possible to retain it on the public works bill.

JOE CROSSWHITE.

KALISPELL, MONT.,  
October 6, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We appreciate your help in retaining the Knowles project on the public works bill.

HAROLD SIBELRUD.

KALISPELL, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

By unanimous action at our regular meeting last night we are on record urging you to do your best to retain Knowles project on the public works bill.

INTERNATIONAL UNION OF OPERATING ENGINEERS, LOCAL 371.

KALISPELL, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Your efforts at keeping the Knowles project on the PBW are appreciated. Montana needs this dam.

WM. STERNER.

KALISPELL, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Just to let you know your efforts in keeping the Knowles project on the PUB are greatly appreciated.

MARGARET PRINCE.

KALISPELL, MONT.,  
October 6, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I urge you to do everything possible to keep Knowles on the PWB.

JOE SZIVI.



THOMPSON FALLS, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

If we build Knowles it will help our economy.

VIRGINIA LOVSAUG.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Our area will prosper if we build the Knowles Dam.

LEONARD NOVSAUG.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
Washington, D.C.:

A Knowles Dam supporter, let's build it.  
BILL BRUCE.

KALISPELL, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We like what you are doing to keep the Knowles project on the PWB. Keep up the good work.

VILA B. STERNER.

HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We need Knowles Dam to encourage industry for the benefit of Montana.

ANDREW N. JOHNSON.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Favor passage of bill to construct Knowles Day project.

JOHN A. NEWELL.

KALISPELL, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We appreciate your help in keeping the Knowles project on the public works bill.

BOB JOHNSON.

KALISPELL, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We stand behind you in your effort to retain the Knowles project in the public works bill.

JULIUS SKAAR.

KALISPELL, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

The Knowles Dam project must remain on the public works bill. Your help is appreciated.

JAMES H. CHOATE.

MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

Montana cannot afford delay on Knowles. Thank you.

WILLIARD and CAROL CARTER.

MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We need industry and jobs to keep young people in Montana. Please authorize Knowles.

ANN and MARGARET ROBERTS.

MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We are praying Knowles will be authorized before adjournment.

CLAY and HULDA CARTER.

MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

Break Montana powers monopoly. Continue your support of Knowles Dam.

JIM SEERY.

MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

Full development of the Columbia is vital to the West. Do A-OK Knowles Dam.

HERBERT and ADELINE BARTRON.

CHARLO, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

People who think for themselves want Knowles for flood control, heat, power, and jobs.

FRANCIS LOGAN.

PABLO, MONT.,  
October 6, 1962.

ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

Please work hard for passage of Knowles. Mr. and Mrs. JAMES FLEMING.

RONAN, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

Do your utmost for the passage of Knowles. Mr. and Mrs. JOE CHARVAT.

RONAN, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

Favorable vote for Knowles important for Montana's economy.

Mr. and Mrs. WILLIAM SELL.

RONAN, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

A favorable vote for Knowles important for Montana's economy.

Mr. and Mrs. JOHN HUGHES.

MISSOULA, MONT.,  
October 6, 1962.

ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

We feel Knowles project wanted and needed in Montana. Please give all possible support.

Mr. and Mrs. WILLIAM BALLARD.

MISSOULA, MONT.,  
October 6, 1962.

HON. ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We urge restoration of the Knowles Dam authorization to the House bill. We need Knowles Dam now; it must not be sidetracked.

EDWINN and LEONA MARVIN.

MISSOULA, MONT.,  
October 6, 1962.

ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

We favor Knowles Dam.

BILL and ANGELINE MCCOY.

MISSOULA, MONT.,  
October 6, 1962.

ARNOLD OLSEN,  
Washington, D.C.:

I recommend that Knowles Dam be passed at this session.

Mrs. FRANCES WAYLETT.

PARADISE, MONT.,  
October 6, 1962.

HON. ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

As a businessman, Knowles Dam is what we need. Eighty percent of my customers are for it.

CARL H. DAHL.

KALISPELL, MONT.,  
October 6, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Urge all efforts keep Knowles in appropriations bill.

N. M. GIES,  
Secretary, Kalispell, Mont., Building  
& Construction Trade Council.

CHARLO, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We want you to support Knowles.

Mr. and Mrs. GENE MEDVED.

MISSOULA, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
Washington, D.C.:

I am in favor of Knowles Dam for Montana's increased industrial growth.

Mrs. LEO HANSEN.

MISSOULA, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Please pass the Knowles Dam in the session we need Knowles Dam.

Miss MARLEN WAYLETT.

MISSOULA, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Have supported multipurpose dam in Paradise-Knowles area since 1953. We still do.

MISSOULA ELECTRIC COOPERATIVE, INC.

MISSOULA, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
Washington, D.C.:

Urge authorization of Knowles Dam. Believe it is for the good of Montana.

DONALD E. WOOLRIDGE.



HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support Knowles Dam because of flood control, power output, storage, wildlife, recreation, economic development.

BEN F. CORTNER.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

I support Knowles Dam because of flood control, power output, water storage, wildlife, recreation, and economic development.

AMY A. FALLEE.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support Knowles Dam because of flood control, power output, water storage, wildlife, recreation, and economic development.

STEVEN S. SALLEE.

POLSON, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
Washington, D.C.:

We urge your support of legislation for Knowles Dam necessary for comprehensive river development.

LEE and ELIZABETH LARSON.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support Knowles Dam because of water storage, progressive development, and wildlife preservation.

Mrs. IVON PINEGER.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support Knowles Dam because of flood control, water storage, and economic development.

AVON PINEGAR.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support Knowles Dam because of flood control, power output, water storage, wildlife, recreation, and economic development.

CHARLES W. McMENUS.

MISSOULA, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Urge passage of Knowles Dam project.

VIRGINIA L. MELTZER.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

Please continue your support of Knowles Dam legislation. We need development of western Montana.

S. BRUCE DeLONG.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

Build the Knowls Dam; it will help our economy.

LELAND E. BREINER.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

I support Knowles Dam. We need development of our resources.

EDNA M. MOONEY.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

Knowles Dam will help. Please build it.

D. J. BROCKWAY.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

I support Knowles for development of Montana.

BERT L. VANCAMPEN.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

I am in favor of construction of Knowles Dam in Sanders County. Please continue support.

KATHRYN DeLONG.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

My support is for Knowles Dam.

M. C. SUTHERLAND.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

Need Knowles dam for complete river development and to alleviate chronic unemployment.

STEPHEN D. BABCOCK.

HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

Knowles Dam is needed to boost the economy and stimulate industrial growth in Western Montana.

MARTIN NEILSEN.

CHARLO, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Our State needs more employment so we need Knowles.

Mr. and Mrs. REN OLSON.

CHARLO, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I would like industry in our State. Support Knowles.

Mr. and Mrs. ORLA HENSEN.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Favor passage of Knowles Dam. Sanders County needs this project.

JOHN F. HARWOOD,  
Sanders County Commissioner.

CHARLO, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We are for Knowles.

Mr. and Mrs. LESTER OLSON.

MISSOULA, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I am in favor of Knowles Dam for the future industrial growth of Montana.

LORENE M. TEMPLETON.

POLSON, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Strongly urge passage of bill for Knowles Dam. Need for power and flood control paramount.

C. E. and ESTHER LIVINGSTON.

MISSOULA, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Please continue supporting Knowles Dam. We feel its in the best interests of Montana.

MARGARET and ROY BUDDITT.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Work program needed badly. The allover picture a good one. We need Knowles Dam.

BETTY LIVINGSTON.

CHARLO, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We need to have Knowles built.

Mr. and Mrs. BERT OLSON.

MISSOULA, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We urge the passage of the Knowles Dam bill. Will we need it here.

Mr. and Mrs. MELVIN PALMER.

HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I am in favor of Knowles Dam for the progress of Montana.

J. H. JOHNSTON.

MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I am wholeheartedly in favor of Knowles. Please continue supporting it.

WILLIAM L. CLOSE.

MISSOULA, MONT.,  
October 6, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Montana must have Knowles Dam. Please put full force of your office behind the project.

TOM DANIELSON.

HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

I support Knowles Dam because flood control, power output, water storage, wildlife, recreation, economic development.

LILLIAN CORTNER.



HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:  
Western Montana needs Knowles Dam with  
low-cost power to boost industrial growth.  
MARCIA NEILSEN.

HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
I support Knowles Dam because flood  
control, power output, water storage, wild-  
life, recreation, economic development.  
MINA ALBERT.

HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
I support Knowles Dam because flood  
control, power output, water storage, wild-  
life, recreation, economic development.  
ALLEN BARNS.

HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
I support Knowles Dam because flood  
control, power output, water storage, wild-  
life, recreation, economic development.  
MRS. BEULAH SNYDER.

CHARLO, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:  
We need power and storage. Build  
Knowles now.

ANN DRISCOLL.

HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:  
Am in favor of Knowles Dam. Western  
Montana needs low cost power for economic  
growth.

THOMAS NEILSEN.

ARLEE, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
We favor Federal Knowles for flood control,  
power, recreation, economic, and democratic  
reasons.

Mr. and Mrs. RAY D. CARY.

MISSOULA, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
Washington, D.C.:  
I am in favor of Knowles Dam for Mon-  
tana's increased industrial growth.  
LEO HANSEN.

HOT SPRINGS, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
I support Knowles Dam because of flood  
control, power output, water storage, wildlife,  
recreation, economic developments.  
R. E. SNYDER.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Imperative build Knowles Dam.  
C. C. COFFEY.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Public works legislation must provide for  
Knowles Dam now. Majority here support it.  
HOWARD M. ROSLYN.

PLAINS, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Strongly urge inclusion of Knowles Dam in  
appropriation for public works. This is a  
must.

JOHN R. GARDEN.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Knowles Dam must be provided for in  
public works legislation. Majority here de-  
mand it.

W. L. VACURA.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Only Knowles Dam can accomplish intelli-  
gent handling and complete development of  
our water.

DUKE SALLEE.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
I support Knowles Dam because of flood  
control, power output, water storage, wildlife,  
recreation, economic development.

MARET BLIXT.

ST. IGNATIUS, MONT.,  
October 7, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Western Montana desperately needs  
Knowles Dam now.

FREDERICK R. MATT.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Businessmen and surrounding communi-  
ties want Knowles authorized this session.

J. J. CHIPMAN.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Company has paid staff to round up tele-  
grams. Supporters of Knowles write and  
send their own.

CHARLES MILLER.

CUSTER, MONT.,  
October 7, 1962.

GREAT FALLS, MONT.,  
October 7, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Urge every effort to include Knowles Dam  
in House conference report.

Regards,

LEONARD KENFIELD,  
President, Montana Farmers Union.

ARNOLD OLSEN,  
Washington, D.C.:  
Big Horn area farmers now know power  
dams cause summer shortage-winter flooding.  
Knowles unjustified.

HARLAN THOMPSON.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Montana and Lake Counties desperately  
need Knowles Dam now.

THOMAS HOOTENGA.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
We appreciate your splendid support of  
Knowles Dam and defiance of company.  
MRS. ROXANNA GOULD.

PARADISE, MONT.,  
October 7, 1962.

Hon. ARNOLD H. OLSEN,  
Member of Congress,  
Washington, D.C.:  
Knowles Dam a very worthwhile project.  
Vote "yes."

W. E. BARTHOLOMEW.

ST. IGNATIUS, MONT.,  
October 7, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Strongly favor Knowles. Montana needs  
it.

DON POSIVIO.

ST. IGNATIUS, MONT.,  
October 7, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Strongly favor Knowles. Don't give in  
to Montana Power.

CLETE and RUTH FEARON.

ST. IGNATIUS, MONT.,  
October 7, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Montana needs Knowles for water storage.  
Western Montana needs a boost.

FRANCIS MOORE.

ST. IGNATIUS, MONT.,  
October 7, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Keep up the fight for Knowles. Western  
Montana needs it.

CHARLES WHALEN.

ST. IGNATIUS, MONT.,  
October 7, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Do everything you can for Knowles. Mon-  
tana needs it very much.

Mr. and Mrs. ARCHIE McDONALD.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Am very strong for Knowles. Try your best  
to keep it on bill.

THOMAS D. GOULD.



COLUMBIA FALLS, MONT.,  
October 6, 1962.

HON. ARNOLD H. OLSEN,  
Member of Congress,  
Washington, D.C.:

We want Knowles Dam passed this session.  
Mr. and Mrs. SAM ROUILLEU.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Thank you for your magnificent fight for  
Knowles and Montana success.

FRED AHRENS.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

All my neighbors hope for approval of  
Knowles before adjournment.

H. DEWAYNE E. OLSEN.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Most of the people strong for Knowles  
authorization.

G. A. ROSENBAUM.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I hope for Knowles authorization now.

R. L. WOLCOTT.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Montana Power is main source against  
Knowles. Most of us are for it.

ARTHUR JONASEN.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I request your support of Knowles Dam.

SHELDON GOULD.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

In favor of Knowles Dam. Pass this ses-  
sion.

Mr. and Mrs. CHARLES V. CORDIER.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

Vote two "yesses" for Knowles Dam.

Mr. and Mrs. ERNEST M. TUFFMAN.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

I would like to see Knowles Dam built.

MARTHA B. TIMLIN.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

Build Knowles Dam, we need it.

EARL WOLLASTON.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

I am for the Knowles Dam.

HELEN BROWN SNIDER.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

I support Knowles Dam. We need devel-  
opment in this area.

FRANKLIN SORESENSEN.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

I support Knowles Dam.

JAMES L. HEIM.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

Please continue to vigorously support  
Knowles Dam.

RUTH MARTMAN.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

This area needs Knowles Dam.

JIM DEAN.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

I am for the Knowles Dam.

BEATRICE JONAS.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

I am for the Knowles Dam.

D. A. MCCHESSNIE.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

Knowles Dam will help the entire West.

JOHN H. PYATT.

HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support Knowles Dam because it would  
help Montana's economy by increased in-  
dustries and jobs.

Mrs. W. V. EHLERT.

PLAINS, MONT.,  
October 8, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We need Knowles Dam for future indus-  
tries.

ROWANNA BROS.

EUREKA, MONT.,  
October 8, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

The entire Northwest needs your support  
on Knowles Dam project.

K. W. VINCENT.

PLAINS, MONT.,  
October 8, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We need Knowles Dam for future progress.  
WILLIE BROS.

EUREKA, MONT.,  
October 8, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We request you do everything possible to  
assure passage of Knowles Dam legislation.  
LINCOLN ELECTRIC COOPERATIVE.

GREAT FALLS, MONT.,  
October 8, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Fight to put Knowles in the House con-  
ference report.

MAY WALTERS HOTEL AND RESTAURANT  
EMPLOYEES UNION.

MISSOULA, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
U.S. Representative,  
House Office Building,  
Washington, D.C.:

We urge approval of Knowles Dam.

JEAN PINSONEAULT.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

I support Knowles Dam.

GILBERT JONAS.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

I support Knowles Dam; we need develop-  
ment of our resources.

FELIX G. CARTER.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

Sanders County and Montana need  
Knowles Dam now.

ELINOR THURMAN.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

I am for the Knowles Dam.

PAT DEAN.

HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

As a citizen of western Montana I urge you  
to support the Knowles Dam program for  
Montana.

WAYNE R. JOHNSON.

KALISPELL, MONT.,  
October 6, 1962.

U.S. Representative ARNOLD OLSEN,  
House of Representatives, House Office Build-  
ing Washington, D.C.:

I am one out of many who urge you to do  
your best in retaining the Knowles project  
on the public works bill.

KEN STERNER.



THOMPSON FALLS, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Build Knowles Dam. We need the employment in this country.

ROY A. MCKENZIE.

PARADISE, MONT.,  
October 6, 1962.

Hon. ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I am definitely for Knowles Dam.

MILDRED O. DAHL.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Western Montana must have the Knowles Dam.

PEARL E. MCKENZIE.

HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
House of Representatives,  
Washington, D.C.:

I favor Knowles Dam because of water storage power output and industry.

CECILIA K. JOHNSON.

HOT SPRINGS, MONT.,  
October 8, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We need Knowles Dam to bring in industry and for other favorable reasons.

Mrs. LILLIAN E. CRARY.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support Knowles Dam.

BONNIE LIGGST.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

Backing you for the Knowles Dam.

ART CRABTREE.

HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

We are in favor of Knowles Dam. Let's build Montana with power.

Mr. and Mrs. D. M. MULLEN.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

I support Knowles Dam; we need development of our resources.

N. ADRIAN PRESTON.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

Vote for Knowles Dam.

DON BROWN.

HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

Knowles Dam means increased business, more jobs, better water use for Montana. I'm for it.

Mrs. ANNA LAUERMAN.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Our support Knowles Dam for the progressive development of Sanbers County in Montana.

Mrs. EMIL MARSH.

MISSOULA, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

I expect you to give Knowles Dam your fullest support.

BURLEY C. RINKE.

MISSOULA, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
Washington, D.C.:

Highly recommend approval of Knowles Dam.

HENRY LOZEAU.

MISSOULA, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
House Building,  
Washington, D.C.:

Urge you to support authorization of Knowles Dam project. Montana needs it.

HOWARD R. GAVIN.

HAMILTON, MONT.,  
October 5, 1962.

Hon. ARNOLD OLSEN,  
Old House Office Building,  
Washington, D.C.:

MPCO statement cost taxpayers untrue. Urge build Knowles Dam. Self-liquidating in 50 years.

FOREST COOPER.

POLSON, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

Congratulations on your Knowles Dam stand; Montana and Northwest greatest need.

SAM K. SMITH.

POLSON, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Please do all you can to keep Knowles in the Senate bill.

Sincerely,

CHARLES HARBALL and SALLY HARBALL.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
Washington, D.C.:

We are in favor of construction of Knowles Dam to further the economy of county.

CARL CLARK.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support Knowles Dam because: Flood control, power output, water storage, wildlife, recreation, economic development.

EDNA REIFSCHNEIDER.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
Washington, D.C.:

Favor passage of Knowles Dam legislation to further advancement of economy of western Montana.

EUGENE P. MAHONEY.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Request your continued support of Knowles Dam legislation. Only intelligent way to develop our rivers.

RICHARD T. THIEGS.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Work program needed badly. The all over picture a good one. We need Knowles Dam.

MAUDE K. SAGE.

DIXON, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Am for Knowles Dam. One of businessmen Dixon, Mont. Would like see improvement Flathead River.

ALBERT C. PAUL.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

Build Knowles Dam. Our great State will no longer be the last frontier.

MARIE ROMSA.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

Fight for Knowles Dam vital for the economy of western Montana.

J. C. ROMSA.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

We need Knowles Dam for jobs that are needed badly in western Montana.

JOE ROMSA.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

Do not let power companies stifle the progress of western Montana. We want Knowles.

Mrs. J. K. ROMSA, Jr.

CHARLO, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Urge authorization of Knowles before adjournment and construction at earliest possible date.

Respectfully,

T. W. and LEILA ROBERTS.

MISSOULA, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Passage of Knowles Dam absolute necessity if all the people in Montana are to participate.

MAURICE J. McDONOUGH.

MISSOULA, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
Washington, D.C.:

I strongly urge the addition of Knowles Dam to the House water resources bill.

Mrs. RICHARD E. RABER.



HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support Knowles Dam for needed water storage and recreation and for benefit of wildlife.

ANTONE A. GRELL.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
Washington, D.C.:

Am in support of Knowles Dam and believe it will help the economy.

RAY J. NOVAK.

MISSOULA, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Recommend approval of Knowles Dam at this session of Congress.

LILIS WAYLET.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We want Knowles Dam, it will help this community and Montana.

Mrs. ROGER D. NYGREN.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support the Knowles project. We need Knowles to help develop our area.

PAUL K. SAYLOR.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Knowles Dam is essential to welfare of county.

CLINTON O. SPINDLER.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Public works legislation must provide for Knowles Dam now; majority here support it.

H. C. SCOTT.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Public works legislation must provide for Knowles Dam now; majority here support it.

JOHN J. GAGNON.

MISSOULA, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
Member of Congress,  
House Office Building,  
Washington, D.C.:

The opinions I derive from talking to clients indicates Knowles is overwhelmingly favored.

RAYMOND W. BRAULT.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support Knowles Dam. It is necessary to control floods.

WALT GOULD.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington D.C.:

I support Knowles Dam. Our depressed area needs this development.

DEWEY L. DUFFEL.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington D.C.:

I support Knowles for development of Montana.

JESSE C. NELSON.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

We want the Knowles Dam. It will help our county.

ESTER BREINER.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

Vote for Knowles Dam.

Mr. and Mrs. BOYD L. DAVIS.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

I am for the Knowles Dam.

RUTH GRAHAM.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

Let's push the Knowles Dam issue through now.

LLOYD R. JOHNSON.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

I favor Knowles Dam.

GEORGE D. HARTMAN.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

We need Knowles Dam.

H. L. MAPLETHORPE.

CHARLO, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

I would like to see Knowles Dam built as we need it.

Mrs. LILA EVANS.

MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
House of Representatives,  
Washington, D. C.:

Please continue your fight in favor of Knowles Dam.

E. E. SOLUM.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

Vote for Knowles Dam.

MARIE GOODE.

MISSOULA, MONT.,  
October 6, 1962.

The Honorable ARNOLD OLSEN,  
Washington, D.C.:

I urge your support for Knowles Dam.

TONY COCHIARELLA.

HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

Knowles Dam is vital to the economy of our Nation and State. We must look to the future of our young people who now must leave Montana for employment opportunities after we have invested heavily in their education.

EARL J. BARLOW.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

Vote for the Knowles Dam.

Mrs. ART CRABTREE.

HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
Washington, D.C.:

I support Knowles Dam because of its importance in water conservation for our Western States.

BILL EHLERT.

MISSOULA, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Strongly urge your support of Knowles Dam legislation.

Mrs. W. L. GANNETT.

MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD M. OLSEN,  
House of Representatives,  
Washington, D.C.:

Knowles Dam sorely needed for economic development of Montana. I strongly urge House authorization.

ARNOLD BOLLE.

MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

Congress failure to authorize Knowles Dam will be bitter disappointment to forward looking Montana citizens.

EDMUND FREEMAN.

RONAN, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

Knowles needed in Montana regardless of opposition.

Mr. and Mrs. WILLIAM HOCKER.

MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

Would appreciate your support for Knowles Dam.

ROBERT H. NEWMAN.

MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

I urge your continued support of the Knowles Dam.

STELLA JEAN HANSEN.

RONAN, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

Water power and employment makes a better Montana. Knowles beneficial.

DOROTHY LUNDVALL.



MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:  
Congratulate your support Knowles Dam,  
Lake County property owners.  
Mr. and Mrs. PETE AUNE.

RONAN, MONT.,  
October 6, 1962.

ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:  
Please work hard for passage of Knowles.  
Mr. and Mrs. EVERETT KRUDDE.

MISSOULA, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:  
Knowles Dam needed for power and flood  
control. Strongly urge passing of this bill.  
RONALD and EVA TOLLEFSON.

MISSOULA, MONT.,  
October 6, 1962.

ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:  
I hope you will be successful in your sup-  
port of the Knowles Dam project.  
DOROTHY BARR.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:  
I support Knowles Dam.  
ANNIE L. GILL.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:  
Our economy depends on passage of the  
Knowles Dam bill.  
HENRY L. GILL.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:  
Let us build the Knowles Dam.  
G. V. TAYLOR.

PARADISE, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:  
Give us Knowles Dam.  
ROBERT E. DRAYTON.

MISSOULA, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:  
Request you pass Knowles Dam at this  
session of Congress.

JOE L. WAYLETT.

MISSOULA, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
We urge the passage of the Knowles Dam  
bill.

STRANGER and FLORENCE TABISH.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
Washington, D.C.:  
Knowles Dam a must for our future gen-  
erations.

ROBERT GILL.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:  
I support Knowles Dam because flood con-  
trol, power output, water storage, wildlife,  
recreation, economic development.  
NIKKI BARNS.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Imperative build Knowles Dam.  
SOPHIA CECILIA ADAMS.

MISSOULA, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
Washington, D.C.:  
I recommend Knowles be passed at this  
session.

NANCY JO WAYLETT.

MISSOULA, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
Senate Office Building,  
Washington, D.C.:  
I recommend that Knowles Dam be passed  
at this session.

Mrs. ERMA LOZEAU.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
We must have Knowles Dam now. Num-  
ber me among its many supporters.  
JOSEPH INESGARDEN.

PARADISE, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:  
We need Knowles Dam badly.  
NONA EVANSON.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
U.S. House of Representatives,  
Washington, D.C.:  
Continue your support of Knowles project  
for the benefit of western Montana and  
Sanders County.

LEVINA M. CLARK.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
I support Knowles Dam because of needed  
flood control, progressive development, and  
recreational purposes.

Mrs. BILLY SCHAFER.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
We need industry. Why educate children  
here and they have to go to other States  
to get jobs.

GORDON MARLENE.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
I support Knowles Dam because flood con-  
trol, power output, water storage, wildlife,  
recreation, economic development.

BUD HOSEA CECIL.

MISSOULA, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
We urge passage of Knowles Dam Bill.  
BOB SHAFER.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Imperative build Knowles Dam.  
HERB FISHER.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
I support Knowles Dam because flood con-  
trol, power output, water storage, wildlife,  
recreation, economic development.  
ALPHA O. HEDIN.

MISSOULA, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
U.S. Representative,  
Washington, D.C.:  
Let's not pet Knowles approval vet bogged  
down in the House. Montana needs Knowles.  
PAULA KNAPP.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:  
I support Knowles Dam. We need more  
power to develop industry.  
ARTHUR HARLOW.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
I support Knowles Dam because of water  
storage power output and economic develop-  
ments.

TED SCHAFER.

CHARLO, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:  
We urge support Knowles Dam.  
DONNIE and CLINTON DEVOE.

CHARLO, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:  
This area needs authorization of Knowles  
Dam if possible.

JOHN and MONICA COLTER.

KALISPELL, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:  
Our council composed of four local unions  
in northwest Montana urge that you insist  
Knowles Dam be retained in the public  
works bill.

CARPENTERS DISTRICT COUNCIL OF  
NORTHWESTERN MONTANA,  
P. PETERSEN, Secretary.

MISSOULA, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
The overwhelming majority of people I  
talked to tell me they want Knowles Dam.  
ROBERT WATT.



KALISPELL, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

Insist on Knowles Dam being retained in public works bill. Our 17 locals in western Montana, 9 in vicinity of Knowles, have repeatedly testified in favor of Knowles-Paradise project at all hearings held in this area.

ROBERT C. WELLER,  
Secretary, Montana District Council  
Lumber and Sawmill Workers.

HAMILTON, MONT.,  
October 5, 1962.

Hon. ARNOLD OLSEN,  
Old House Office Building,  
Washington, D.C.:

Respectfully urge your continued support on Knowles Dam measure. Will stimulate permanent employment in area.

GILBERT L. JELINEK.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We need industry. Why educate children here and they have to go other States to get jobs.

ANN MARLENEE.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

I support Knowles Dam because flood control, power output, water storage, wildlife, recreation, economic development.

JOE BLIXT.

HAMILTON, MONT.,  
October 5, 1962.

Hon. ARNOLD OLSEN,  
Old House Office Building,  
Washington, D.C.:

Without Knowles comprehensive development Columbia River impossible. All opposition by Montana Power.

MILES ROMNEY.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We support Knowles Dam. Saunders County in the Northwest needs this project badly.

ROY R. MILLS.

MISSOULA, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Al and I support the Knowles Dam proposal. Good luck.

MARGARET STONE.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support Knowles Dam because of flood control, power output, water storage, wildlife recreation, and economic development.

MILDRED O. McMENUS.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support the Knowles Dam project because of need of flood control and progressing developments.

Mrs. THESPA A. GRELL.

POLSON, MONT.,  
October 6, 1962.

ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

Hundreds of Lake County people support your stand for Knowles Dam.

Mr. and Mrs. LEON TERRY.  
Mrs. MARY MEYER.

THOMPSON FALLS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

We need the Knowles project now.

W. BRITTON.

POLSON, MONT.,  
October 6, 1962.

Representative ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

Congratulations on your progress on Knowles Dam. Continue effort on our behalf.

Mr. and Mrs. CARRL A. HALGREEN,  
Mr. and Mrs. PAUL HAVOLICH,  
Mrs. DORA BRUCE.

CHARLO, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:

I am in favor of Knowles being built immediately.

A. A. HERTZ.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Western Montana needs Knowles Dam desperately. Urge prompt support.

DAN SEERY.

ST. IGNATIUS, MONT.,  
October 6, 1962.

Hon. ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Urge all possible support for Knowles Dam. Western Montana needs this project.

J. E. TAPLIN.

MISSOULA, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support Knowles Dam because of progressive development, economic development and recreational development.

C. E. LATHAM.

CHARLO, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Urge authorization of Knowles Dam this session.

GRACE T. KERR.

MISSOULA, MONT.,  
October 5, 1962.

Hon. ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Majority of western Montanans favor Knowles. You've done fine job. We support you strongly.

BERTHA PADDOCK.

CHARLO, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

At least 50 percent of this area strongly supports Knowles Dam.

S. R. LOGAN.

MISSOULA, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
Member of Congress,  
House Office Building Washington, D.C.:

Residents of the area involved favor Knowles as I do.

Mrs. ROSIE GRAY.

MISSOULA, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
Member of Congress,  
House Office Building Washington, D.C.:

From conversations with clients it is my opinion Knowles is overwhelmingly favored.

RAYMOND P. TIPP.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

We need Knowles Dam.

ART THURMAN.

HOT SPRINGS, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support Knowles Dam because flood control, power output, water storage wildlife, recreation, and economic development.

MABEL COON.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Favor Knowles Dam. Sanders County needs this project.

Mrs. JACK HARWOOD.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:

We want Knowles Dam. It will help this community and Montana.

ROGER D. NYGREN.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

It is essential to pass Knowles Dam bill. We need it.

RICHARD HARWOOD.

PLAINS, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Urge passage of Knowles Dam.

Mrs. MINNIE HARMOND.

PARADISE, MONT.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

I support Knowles Dam because flood control, power output, water storage, wildlife, recreation, economic development.

HARRY CECIL.

CHARLO, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:

Certainly need the power of Knowles Dam. Hope you can get it for us this session.

NICK HERIN.



HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House of Representatives,  
Washington, D.C.:  
Fight for Knowles, we represent most of  
Perma.

Mr. and Mrs. EDWARD MULICK.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
Washington, D.C.:  
Knowles Dam a must for good of Sanders  
County, Mont.; United States.

JAMES L. TAYLOR.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Urge you to pass Knowles Dam bill. We do  
need the boost to our economy.

Mrs. RICHARD HARWOOD.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
We want Knowles Dam. Good for State.

A. F. DAYLOR,  
SIG DAYLOR.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Authorized to pass bill providing for  
Knowles Dam. Badly needed this area.

DOROTHY VACURA.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
We want Knowles Dam. Good for Mon-  
tana.

Mrs. A. F. DAYTON.

MISSOULA, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Urge passage of Knowles Dam project.

GEORGE C. MELTZER.

MISSOULA, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Urge passage of Knowles Dam project.

DAVID M. MINNES.

DIXON, MONT.,  
October 6, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:  
Vote for Knowles Dam.

ED CANTRELL.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Knowles Dam is essential to county.

HAROLD E. FARRINGTON.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
Washington, D.C.:  
I support Knowles Dam. Knowles will  
help recreation and wildlife.

BARBARA GOULD.

CHARLO, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Lots of people here strong for Knowles  
Dam.

JOHN YEAGER.

HOT SPRINGS, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:  
I support Knowles Dam because flood con-  
trol, power output, water storage, wildlife,  
recreation, economic development.

BUD COON.

MISSOULA, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
Member of Congress,  
Washington, D.C.:  
I favor Knowles Dam.

DONALD F. EGELAND.

MISSOULA, MONT.,  
October 5, 1962.

Hon. ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
We and our friends are in strong support  
of the Knowles Dam.

BEATRICE K. and EUGENE H. WEIGEL.

THOMPSON FALLS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
Request you act affirmatively on Knowles  
Dam legislation. Sanders County and the  
West need power.

GERTRUDE J. MAHONEY.

PLAINS, MONT.,  
October 5, 1962.

ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
For the common good of Montana, very  
important that Knowles Dam be authorized.

L. J. CARTER.

PLAINS, MONT.,  
October 5, 1962.

Representative ARNOLD OLSEN,  
House Office Building,  
Washington, D.C.:  
I vote for Knowles Dam.

DEAN D. STAPLETON.

MISSOULA, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:  
I recommend the approval of Knowles Dam.

NELBA H. LOZEAU.

MISSOULA, MONT.,  
October 5, 1962.

Congressman ARNOLD OLSEN,  
Washington, D.C.:  
I strongly urge the passage of the Knowles  
Dam bill.

HELEN MURRAY.

#### FEDERAL PAY BILL

Mr. AVERY. Mr. Speaker, I yield 6  
minutes to the gentleman from Michigan  
[Mr. JOHANSEN].

(Mr. JOHANSEN asked and was given  
permission to speak out of the regular  
order.)

(Mr. JOHANSEN asked and was given  
permission to revise and extend his re-  
marks and to include extraneous  
matter.)

Mr. JOHANSEN. Mr. Speaker, dur-  
ing debate on Monday and Friday of last  
week on the Federal pay-postal rate-  
retirement pay bill, I repeatedly warned  
that adoption of the pay provisions of  
this bill would trigger enormous pres-  
sures in the next Congress for very sub-  
stantial pay increases at the top of the  
classified pay system, in the Executive  
Pay Act, and in the salaries of the Fed-  
eral Judiciary and Members of Congress.

The administration evidently has lost  
no time in providing confirmation of that  
warning.

The able staff writer on Federal em-  
ployee affairs of the Washington Even-  
ing Star, Mr. Joseph Young, in his  
column "The Federal Spotlight," yester-  
day reports that administration officials  
already are at work on proposals to be  
submitted to the new 88th Congress in  
January.

In this same article, Mr. Young calls  
attention to another aspect of the chain  
reaction started by the ill-considered and  
ill-advised legislative action last week.

He points out that enactment of the  
supergrade, Executive Act, and congres-  
sional pay increases next year will in-  
evitably result in new pressures for still  
further pay increases in the lower levels.

I quote Mr. Young's exact words:

All this has significance, too, for Federal  
employees in the upper-middle class and  
even those below these grades. For once  
the Executive Act and supergrade pay ceil-  
ings are raised, this will give more latitude  
to increasing eventually Federal pay down  
the line, which until now has been held  
down because of restrictions on the salary  
paid to the top grades.

If events bear out this prophecy—and  
I have no doubt they will unless the Con-  
gress miraculously discovers the courage  
to resist periodic pressure campaigns for  
pay increases—it will prove that the ad-  
ministration's proposed policy of salary  
comparability is a complete fraud upon  
the American taxpayer.

It will prove equally fraudulent the  
claims of sponsors of this year's pay leg-  
islation that its adoption will forestall  
these periodic pressure drives.

During consideration of this year's pay  
legislation in the executive sessions of the  
House Committee on Post Office and  
Civil Service, I offered an amendment to  
provide a straight 7 percent across-the-  
board pay raise. It was voted down.  
Yet this approach to the problem would  
have provided many justifiable pay in-  
creases—and some not so justifiable—  
but at the same time it would have  
avoided the kind of lid-raising operation  
that was finally carried out and which  
obviously is going to be pursued further  
when Congress returns next January.

These remarks are intended to put the  
next Congress on notice as to what they  
will face. It is also intended to put the  
American taxpayers on notice as to what  
they face.

One final comment: Mr. Clarence B.  
Randall, who has served as a business-  
man "yes-man" under both Republican  
and Democratic administrations, and  
who was Chairman of President Ken-  
nedy's Federal Salary Policy Panel, in a  
statement early this year published by  
the National Civil Service League made



this incredible and totally unsubstantiated statement:

I am firmly convinced that higher Federal salaries would attract a level of competence that would so improve Government operations that there would be no out-of-pocket cost at all.

In view of the very substantial increase in payroll costs of Federal employee salary increases—of which this year's billion dollar boost is obviously only the first installment—I wonder when the American taxpayers will begin to get a "refund" in line with Mr. Randall's preposterous prediction.

I advise the American taxpayers not to hold their breath waiting for it.

Under leave to extend and revise my remarks, I include the full text of Mr. Young's column dealing with this subject:

THE FEDERAL SPOTLIGHT—WORK BEGINS ON INCREASING EXECUTIVE ACT SALARIES

(By Joseph Young)

Administration officials already are at work on proposals to be submitted to the new 88th Congress in January for raising Executive Act salaries, Government supergrade careerists' pay as well as the salaries of Members of Congress.

Present administration thinking is to propose a \$35,000 salary for Cabinet officers and substantial increases as well for agency heads, commissioners, assistant secretaries, etc., who come under the Executive Pay Act. The top pay for supergrade career jobs, set in the new pay raise legislation enacted by Congress at \$20,000, would be raised to \$24,500 as a result of the administration's pending proposal. Other supergrade salaries also would be adjusted upward accordingly.

President Kennedy also is expected to suggest—rather than formally recommend, since this is the prerogative of Congress—that Congress raise the present \$22,500 salary of the members to \$30,000 a year.

Discussions already are being held by administration officials with key members of Congress and the leaders and staff members of the Congressional committees which would handle such legislation. Such discussions are expected to continue during the adjournment of Congress.

The administration wants to have the features of the proposal straightened out to everyone's satisfaction so that the official proposals will get prompt action from Congress next year.

As a matter of fact in its report accompanying the Federal classified and postal employee pay raise bill which was enacted last week by Congress, the Senate Civil Service Committee "urged" President Kennedy to submit proposals next year for raising Executive Act and supergrade pay. It did not mention Congressional salaries, but it is the understanding that any Executive Act and supergrade salary raise would have to be accompanied by a Congressional pay raise.

All this has significance, too, for Federal employees in the upper-middle grades and even those below these grades. For once that Executive Act and supergrade pay ceilings are raised, this will give more latitude to increasing eventually Federal pay down the line, which until now has been held down because of restrictions on the salary paid to the top grades.

Mr. GROSS. Mr. Speaker, will the gentleman yield?

Mr. JOHANSEN. I am glad to yield to the gentleman from Iowa.

Mr. GROSS. I commend the gentleman for his statement. Of course it was made implicit in the pay increase bill

that there would be legislation in the next session of Congress to increase the pay of the executive branch of the Government as well as Members of Congress. Already there is a bill lurking around here somewhere that would increase the pay of certain District of Columbia officials because it seems that the employees of the District, whose pay was increased, will be drawing higher salaries than their chiefs; and this comes about as a result of the pay increase bill which was passed through the House with practically no explanation. I hope Members of the House are at last aware that so-called pay increase bill also increased congressional retirement and that those who voted for it voted to increase congressional retirement.

Mr. JOHANSEN. The gentleman is correct. I thank him for his comments, and I thank the gentleman from Kansas for yielding me this time.

#### **PUBLIC WORKS APPROPRIATION BILL, 1962**

Mr. SMITH of Virginia. Mr. Speaker, I move the previous question on the resolution.

The previous question was ordered.

The resolution was agreed to.

A motion to reconsider was laid on the table.

The SPEAKER pro tempore. Without objection the Chair appoints the following conferees: Messrs. DAVIS of Tennessee, JONES of Alabama, BLATNIK, CRAMER, and BALDWIN.

There was no objection.

#### **TEACHERS' SALARY INCREASE, DISTRICT OF COLUMBIA**

Mr. McMILLAN. Mr. Speaker, I ask unanimous consent to take from the Speaker's table the bill (S. 1447) to amend the District of Columbia Teachers' Salary Act of 1955, as amended, and to provide for the adjustment of annuities paid from the District of Columbia teachers' retirement and annuity fund, with House amendments thereto and agree to the conference asked by the Senate.

The Clerk read the title of the bill.

Mr. GROSS. Mr. Speaker, reserving the right to object, if this bill is taken to conference as the gentleman is asking be done, I assume there will be no effort made to attach a pay increase for certain District officials who now find themselves on the lower end of the totem pole as compared with the pay increase that was voted the other day for some of the "Indians," otherwise employees of the District of Columbia.

Mr. McMILLAN. If the gentleman will yield, I would like to state those officials you referred to will be considered in another bill.

Mr. GROSS. So the gentleman will resist any attempt to increase the pay of any officials of the District government through the medium of this bill?

Mr. McMILLAN. That is correct. I would like to say to the gentleman that I agree thoroughly with him that we should never have increased the salaries

of clerks in the District higher than that of the District Commissioners.

Mr. CURTIS of Missouri. Mr. Speaker, further reserving the right to object, would the gentleman briefly explain what the bill is and the House amendment? The two are compatible? The amendment is germane?

Mr. McMILLAN. Yes. The Senate passed a salary increase bill with the amount of 14 percent. The House figure was 10.1 percent. The House left out some of the principals and the Superintendent.

Mr. CURTIS of Missouri. In other words, it is a matter germane to the bill the House passed.

Mr. McMILLAN. Yes.

The SPEAKER. Is there objection to the request of the gentleman from South Carolina?

The Chair hears none and appoints the following conferees: Messrs. DOWDY, WHITENER, HUDDLESTON, BROYHILL, and HARSHA.

#### **STATE, JUSTICE, AND COMMERCE, THE JUDICIARY, AND RELATED AGENCIES APPROPRIATION BILL, 1963**

Mr. ROONEY. Mr. Speaker, I call up the conference report on the bill (H.R. 12580) making appropriations for the Departments of State, Justice, and Commerce, the judiciary, and related agencies for the fiscal year ending June 30, 1963, and for other purposes, and ask unanimous consent that the statement of the managers on the part of the House be read in lieu of the report.

The Clerk read the title of the bill.

The SPEAKER pro tempore (Mr. ALBERT). Is there objection to the request of the gentleman from New York?

Mr. GROSS. Mr. Speaker, reserving the right to object, I assume the gentleman proposes to take ample time to explain this conference report?

Mr. ROONEY. I do, Mr. Speaker.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from New York?

There was no objection.

The Clerk read the statement.

(For conference report and statement, see proceedings of the House of October 8, 1962.)

Mr. ROONEY. Mr. Speaker, I yield myself such time as I may require.

Mr. Speaker, the bill as now before the House for consideration contains a total of \$2,025,895,700 in direct appropriations. It is \$124,680,000 higher, including \$100 million to enable the President to provide a loan to the United Nations, than the amount as it was passed by the House. However, I should explain that in addition to this \$100 million, a total of \$19,070,000 in additional budget estimates were also considered by the other body. It is now \$10,913,000 below the amount of the bill as passed by the other body.

It should be noted that the bill as passed by the House on July 20, 1962, was \$102,962,300 below the total amount of the budget estimates presented to the House Committee on Appropriations. As it passed the other body it was \$86,439,300 below the total amount of the budget estimates.



It is presently and as now before this body for approval \$97,352,300 below the total budget estimates for the fiscal year 1963.

The conferees feel that there is sufficient money included in this bill even with this cut of \$97,352,300 for the agencies and departments concerned to carry

on in proper and ample fashion during the present fiscal year.

I should add that the pending bill also includes a total of \$3,251,200,000 for the Bureau of Public Roads to be derived from the highway trust fund.

Mr. Speaker, I ask unanimous consent that I may at this point in the RECORD

insert a table indicating the action of the conferees with regard to the various items carried in the bill.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from New York?

There was no objection.

The matter referred to follows:

Item	Budget estimates	Passed House	Passed Senate	Conference action	Conference action compared with—		
					Budget estimate	House	Senate
Department of State.....	\$435,064,000	\$283,480,000	\$400,047,000	\$396,185,000	-\$38,879,000	+\$112,705,000	-\$3,862,000
Department of Justice.....	309,300,000	305,727,000	306,677,000	306,677,000	-2,623,000	+950,000	-----
Department of Commerce.....	1 836,099,000	781,695,000	800,447,000	793,670,000	-42,429,000	+11,975,000	-6,777,000
Bureau of Public Roads (highway trust fund).....	(3,250,500,000)	(3,251,200,000)	(3,251,200,000)	(3,251,000,000)	(-1,300,000)	-----	-----
The judiciary.....	62,735,000	60,270,700	61,570,700	61,570,700	-1,164,300	+1,300,000	-----
American Battle Monuments Commission.....	1,550,000	1,523,000	1,523,000	1,523,000	-27,000	-----	-----
Commission on Civil Rights.....	995,000	950,000	950,000	950,000	-45,000	-----	-----
Federal Maritime Commission.....	2,900,000	2,100,000	2,700,000	2,300,000	-600,000	+200,000	-400,000
Foreign Claims Settlement Commission.....	700,000	700,000	700,000	700,000	-----	-----	-----
Small Business Administration.....	306,000,000	305,750,000	305,750,000	305,750,000	-250,000	-----	-----
Subversive Activities Control Board.....	395,000	395,000	395,000	395,000	-----	-----	-----
Tariff Commission.....	2,950,000	2,900,000	2,950,000	2,950,000	-----	+50,000	-----
U.S. Arms Control and Disarmament Agency.....	6,500,000	6,500,000	6,500,000	6,500,000	-----	-----	-----
U.S. Information Agency.....	158,060,000	149,225,000	146,599,000	146,725,000	-11,335,000	-2,500,000	+126,000
Total.....	1 2,123,248,000	1,901,215,700	2,036,808,700	2,025,895,700	-97,352,300	+124,680,000	-10,913,000

1 Includes \$115,480,000 adjustment for borrowing authority replaced in bill by appropriations.

Mr. ALGER. Mr. Speaker, will the gentleman yield?

Mr. ROONEY. I yield to the gentleman from Texas.

Mr. ALGER. Mr. Speaker, I see in the bill amendment 12 concerning some language relating to a new prison psychiatric institution as proposed by the Senate.

I ask unanimous consent that I be permitted to revise and extend my remarks and include a letter addressed to the Honorable Robert Kennedy, Attorney General.

Mr. ROONEY. Mr. Speaker, reserving the right to object, and I shall not object, I wonder if the distinguished gentleman from Texas has yet learned what General Walker was doing a week ago Sunday night on the campus of Ole Miss?

Mr. ALGER. The gentleman thinks he knows and reminds the gentleman from New York, as he did last week, when the same question was asked, this is for the court to decide.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Texas [Mr. ALGER]?

There was no objection.

Mr. ALGER. Mr. Speaker, on several occasions last week I took the floor of the House to point out the dangers to the civil rights of all our people in the procedures which were being followed in denying equality under the law to Gen. Edwin Walker. We are all happy, I am sure, that the mistakes that were being made in the General Walker case have been somewhat corrected by the reduction of the bond asked for his release, although \$50,000 is still an unreasonable and unjustified figure, and in allowing General Walker to make the bond and be released pending a trial.

Unfortunately, we cannot allow the matter to end here. There are several questions involved in the arrest and subsequent events in the General Walker case which demand answers. It is vital that Congress and the American people

have a complete explanation from the Attorney General as to the part played in this tragic affair by a Government psychiatrist, Dr. Charles Smith. According to the news media, Dr. Smith made a professional decision that General Walker should undergo a mental test on the basis of press reports and an examination of General Walker's medical record. If this is true, it is astounding that such a procedure could take place in the United States or that it could be condoned by the Justice Department. I think Congress has a right to know the identity of Dr. Charles Smith, his role in our Government, his professional background and ability, and upon what grounds, moral or legal, he could make the decision he did, upon the evidence reported. I think the Congress must know what medical record he consulted and how he obtained access to it.

In this connection I have asked the Attorney General for a full report and an investigation of the methods employed by Dr. Charles Smith. Also, by what right legally, James Bennett, prison head, transferred Gen. Walker to the Missouri Mental Hospital. If the Department of Justice is unable to undertake such an investigation and to furnish Congress with a proper report, I shall ask that the investigation be made by a duly constituted congressional committee. I include my letter to the Attorney General herewith:

OCTOBER 10, 1962.

The Honorable ROBERT KENNEDY,  
Attorney General of the United States,  
Department of Justice, Washington, D.C.

DEAR MR. ATTORNEY GENERAL: Although Gen. Edwin Walker has now been released on bond and the case has been redirected to proper legal procedures, there are several questions involved in his arrest that demand an answer. As I explained to you on the telephone last week and, as I repeated on the floor of the House, during my discussion of General Walker's arrest, I am concerned only with the protection of every American citizen against illegal arrest or prosecution. If we are to remain a free nation there must

be equality under the law for all our citizens, those with whom we disagree as well as those whose cause we support.

There are some grave questions which have come up with the arrest and subsequent events in the case of General Walker. I think Congress has a right to know and I think the American people have a right to know your position on two matters in this connection.

First, under what legal procedures and by what authority did the Director of Federal Prisons, James Bennett, order the removal of General Walker from Mississippi to the Federal Prison at Springfield, Mo.?

Second, under what legal authority did the Government psychiatrist, Dr. Charles Smith, order General Walker held for examination? From the newspaper accounts we are informed that Dr. Smith made this decision based upon press reports and an examination of General Walker's medical record. This action upon the part of Dr. Smith is the most frightening aspect of this whole sorry procedure. How can any reputable man of medicine or any responsible Government official make a judgment of such a nature on such evidence? If this can be done with the approval of the Department of Justice, no person in this Nation is safe from the violation of his civil rights.

Mr. Attorney General, I believe that a full report on Dr. Smith's unwarranted action must be given to Congress and I propose that a full and complete investigation of the methods employed by this man be instituted at once. If the Department of Justice feels it is unable to undertake such an investigation, it will be my purpose to ask that it be done by the Congress.

I hope you will agree to the necessity of a prompt reply.

Sincerely yours,

BRUCE ALGER.

Mrs. BOLTON. Mr. Speaker, will the gentleman yield?

Mr. ROONEY. I yield to the distinguished gentlewoman from Ohio [Mrs. BOLTON].

Mrs. BOLTON. Mr. Speaker, I wanted to ask whether the gentleman could give me the amount of money for development grants and development loans applicable to Africa.



the wishes of the American people. An example was the proposal for the withholding of taxes on interest and dividends. Consequently, the tax bill was in large measure rejected by the Congress, and the Nation is still without much-needed tax reform. New proposals to revise our tax laws are now promised for next January. I hope the bill will be responsive to the desires of Americans and will be a sensible, reasoned proposal capable of invigorating growth in our economy.

I have long advocated a general revision of the Internal Revenue Code with emphasis on such overdue reforms as a new schedule of realistic depreciation rates. The 1962 tax bill was written behind closed committee doors after a year of study and debate. It was presented to the House of Representatives on March 29th but no amendments were permitted during the final debate. Individual Members of Congress like myself had no chance to improve the bill by changes based on their experience or special skill and knowledge of tax law. I, therefore, voted against that bill because its effect was to discriminate against every taxpayer in the United States. Instead of closing some alleged tax loopholes it would have created certain special tax privileges.

The 1962 tax legislation that finally emerged from Congress was a watered down version of the original proposals. In my opinion neither the original nor final version of the bill adequately met the new demands occasioned by our contemporary economic structure.

**Depreciation allowances:** The administration in 1962 took executive action to liberalize depreciation allowances. I have long advocated the tax reform, but feel that the responsibility for establishing meaningful rules in this vital area belongs to the Congress. It should not be left to the whims of executive edict as in the past. I personally favor much more liberal depreciation allowances than those granted by the administration. The Congress must also approve other programs of reform. It must be prepared to make up for the deficiencies of the Executive in the area of economic policy.

**Increase in national debt:** On June 14, 1962, the House approved an increase in the amount of bonded indebtedness to \$308 billion, a new record for this country. I voted against raising the debt limit to this figure. On two previous occasions in the 87th Congress I voted to raise the temporary debt limit, first from \$293 to \$298 billion, and later to \$300 billion. I had voted for additional military items that were required by the Berlin crisis as well as for other military expenditures. For these reasons I felt the increases to be justified and that the only responsible thing to do was to vote to authorize the sale of bonds to pay the bill.

In voting on the latest increase, I felt differently. When the President came back for an additional \$8 billion authority I felt that we were reaching a danger point at which the brakes must be applied. We are reaching a saturation point as far as the bonded indebtedness

is concerned. Unless the people of this country are alert to the danger inherent in the rapid growth of the national debt, we are in for serious fiscal troubles. For these reasons I voted to limit the increase to \$306 billion and when that motion failed, I voted against the increase to \$308 billion.

#### ECONOMIC LAG AND COUNTERACTION

**Unemployment:** In my circuit riding trips through the Sixth District I have been saddened by talking with families which have separated because of the harsh necessity of the husband and father having to look elsewhere for work. Some families are buying groceries only through the industry and courage of wives who have turned the living room into a home workshop.

Unemployment figures in the Sixth District during the past three winters compared to the national average are as follows:

	[In percent]		
	February 1962	March 1961	March 1960
Hagerstown labor market area	13.1	13.6	13.2
Cumberland labor market area	10.5	10.8	10.4
National average	6.46	6.7	5.56

I have repeatedly called on the Area Redevelopment Administration and the Small Business Administration for help. I have continued to work with the administration to secure defense contracts for Maryland industry. I have personally solicited support for a Western Maryland Economic Council to help coordinate all these efforts. I have supported the Area Redevelopment Act, popularly known as the depressed area bill, with its concomitant promise of assistance to our economically depressed areas of western Maryland. Most recently I supported the administration's Public Works Acceleration and Coordination Act which will provide substantial assistance to areas with chronic unemployment and depressed economic conditions. It is good to be able to report that these efforts are achieving positive and substantial results. The latest unemployment figures show that the rate for the Cumberland labor market area has fallen to 6.3 percent, and the rate in Hagerstown area is now at 5 percent, its lowest figure for many years. Incidentally the Hagerstown rate is now below the national average of 5.8 percent.

**Area redevelopment:** For 30 years the western counties of the sixth district have suffered from fluctuations in employment and industry. A purposeful effort is being made to find both short- and long-range solutions to this problem. I organized an economic conference for western Maryland and I support plans for a permanent economic council to coordinate redevelopment throughout the district.

New and expanded industry is essential to relieve our plight. The possibility of tourism as a new source of jobs should be emphasized. The sixth district has

the setting for it: Mountain scenery, wild woodlands, rivers, and lakes; and proximity to the metropolitan areas of the East.

I voted for the area development, or depressed areas, bill which provides \$394 millions to communities classified as areas of substantial and persistent unemployment. Hagerstown and Cumberland should benefit under this act.

**Public works bill:** Both Houses of Congress approved the \$900 million Public Works Coordination and Acceleration Act. As long as thousands of people in western Maryland are unemployed and underemployed, no valid opportunity to create jobs should be denied them. For this reason, it seemed essential to me to join with the other Appalachian area Congressmen of both parties in supporting this bill. The Presidential power to turn the program off and on at will was deleted and, the funds must be expended in depressed areas.

It is a matter of regret that in our own Sixth Congressional District we have had three such areas. It is my intention to work with the agencies involved to see that some of the funds provided under this public works bill will be expended in our district where help is desperately needed. Unemployment there has been a persistent problem for a number of years and has been acute during the past several winters.

#### EDUCATION

**Education bill, 1961:** Congressional consideration of the 1961 education bill was fraught with discussion over Government assistance to private schools and administration parliamentary maneuvering. Events in the House saw the President's education bill abandoned in the Rules Committee and hurriedly superseded by another sponsored by the gentleman from New York, Chairman ADAM CLAYTON POWELL. Copies of this compromise bill were only made available to Members of the House late on a Tuesday afternoon with action called for in the House the next day under a parliamentary procedure known as Calendar Wednesday. In other words, less than 24 hours was provided to read and study the proposed alternate education bill of 1961, and to seek necessary answers to pertinent questions concerning this bill.

I voted against granting the request of Chairman POWELL for bobtailed debate and abbreviated consideration on Calendar Wednesday. It was with the hope of more responsible committee behavior than this that I voted last year to enlarge the House Rules Committee. The intention of that action was to promote a full, constructive flow of ideas and proposals from the committee to the entire House.

**Impacted area assistance:** I have always supported the view that some assistance for local education by the Federal Government is both appropriate and necessary. One of the first bills I introduced in Congress provides for continuation of the time tested and equitable impacted area program by which the Federal Government has assisted local school boards in meeting increased educational expenditures which arise as a



direct result of Federal activities within the county. This legislation was enacted in 1961.

**Aid to teachers of the deaf:** I cosponsored legislation to establish a Federal program for the training of teachers for the deaf. The bill establishes a 10-year program for providing funds to train teachers and to provide additional persons to train the teachers in institutions of higher learning. This bill is now law.

**College tuition income-tax deduction:** In order to alleviate the economic burden on those currently paying the rising cost of higher education, I introduced legislation to allow an individual an itemized deduction for the amount of tuition paid to a college, university, or other institution of higher learning. The maximum deduction would be \$500, subject to a limitation of educational benefits paid by the Federal Government under present laws. I believe that it is proper and necessary to extend deductions to those individuals paying tuition to institutions as well as to continue currently authorized deductions for contributions to the same academic institutions. Unfortunately consideration of this and similar measures was postponed until next year.

**Higher education bill 1962:** The failure to enact an education bill for the college and university level in the 87th Congress borders on national tragedy. Due in great measure to a lack of forceful leadership, much needed Federal assistance for higher education was either abandoned or disapproved. I voted for this Federal assistance to higher education, but the measure was defeated. Defeat of the college aid bill reflects a tragic disregard of the evident needs of our American system of higher education. Inaction of Congress deprives American youth of necessary new college facilities and tuition assistance. Although while America's youth may be the first to suffer because of congressional failure, the Nation is the ultimate loser.

**General aid to education:** No bill to provide general Federal aid to elementary and secondary schools came to a vote in the House of Representatives during the entire 87th Congress.

#### JUDGESHIPS

We think of a day in court as a right which every American can demand when he needs it. This right has been virtually denied as a result of political delays in creating new Federal judgeships to carry the workload in the courts. I voted to authorize the appointment of 73 new judges. It is to be hoped that ability and integrity, not politics, will be the major criteria in the selection of new judges.

#### MINIMUM WAGE

The central question in minimum wage legislation was not money, since both sides agreed in debate on identical wage increase proposals. The difference lay in the legal approach: whether or not to adhere to the constitutional principles governing interstate commerce. I felt that we should do so, and was therefore unable to vote for the bill approved by the majority.

#### SOCIAL SECURITY BENEFITS

The 1961 bill provided for increases in minimum retirement benefits for retired workers and widows of covered workers; optional retirement for men at age 62 as well as women, at proportionately reduced benefits; and a slight increase in the \$1,200 outside earning limitation. I voted for this legislation and for similar extension of railroad retirement benefits.

#### HOUSING

I voted against the administration's \$4.9 billion housing bill in the first session. I was disturbed by such items as the increase in the President's request for a facilities program which was raised from \$50 to \$500 million only a matter of days after the President had come personally to the Congress to seek a curtailment in and to specifically ask Congress not to enact bills that increased his spending requests. In rural housing, as an example of what happened, the President had requested an extension of an unexpended balance of \$207 million. This figure was doubled by the House committee to \$407 million. Exaggeration of this sort was out of line with the needs of the country. We must assess the urgent needs in housing in the light of our heavy but necessary defense expenditures. I voted for extension of the current housing program for a year at a cost of \$1.1 billion.

#### OTHER LEGISLATION

I have introduced legislation in various fields including bills to: permit withholding of State income tax from Federal payrolls as a convenience to Government employees; exempt Government employees from the prohibition of the Hatch Act in municipal and county elections; extend the benefits of the Library Services Act to areas either lacking public libraries or with inadequate library facilities; provide an increase in the salaries of teachers for the District of Columbia; and improve firefighting services in the Washington metropolitan area.

#### OMNIBUS RIVERS AND HARBORS AUTHORIZATION BILL

(Mr. SAYLOR asked and was given permission to extend his remarks at this point in the RECORD.)

Mr. SAYLOR. Mr. Speaker, now that the omnibus public works bill is being taken to conference, I should like to call to the attention of my colleagues the importance of standing fast against Senate attempts to create voluminous alterations in our version of the bill. Perhaps I am being unfair in presupposing the attitude of our friends on the other side of the Capitol with respect to H.R. 13273, yet failure of that body to recall the bill for adoption over the past several days would indicate a measure of controversy for the conferees.

Mr. Speaker, there is no question about the importance of our getting away from Washington as quickly as possible. While personal appearances in our constituencies cannot take precedence over emergency work that needs to be done here in the Capitol, voters rightfully expect us to make every attempt to get

back as quickly as possible so that we may report to them on a personal basis and answer any last minute questions that may arise. I regret that we have been held here into the month of October. I think many unnecessary delays took place almost from the time that the second session convened last January. Now we have less than 1 month until election day, yet we cannot afford to be less conscientious in our sworn duties than if the session were just beginning.

I have extreme confidence in the distinguished gentlemen serving on the conference on the omnibus public works bill. If, however, the Senate remains adamant in its proposal to keep its many unwise and unnecessary projects that it added to H.R. 13273 last week, then we must pledge ourselves to see this battle through regardless of how much longer we must remain on duty. I was deeply gratified at the impressive House vote to delete the proposed Burns Creek Reservoir and power project from the bill. The attempt to sneak this Snake River project through Congress in this manner after it had been rejected by a standing committee was an affront to recognized congressional procedure. This action by the 87th Congress will serve as a rallying force on the side of good government if and when similar tactics are attempted in the years to come. For us to have voted otherwise would have set a dangerous precedent from which legislative confusion and chaos would emerge and spawn at the expense of the Nation's taxpayers.

Mr. Speaker, it is unnecessary for me to reiterate the many bad features of the Burns Creek project. I have studied every facet of it and I have reported time and again that Congress would be grossly derelict in its responsibilities if it were to endorse this wasteful, undesirable, and unnecessary proposal. Our Interior and Insular Affairs Committee has had 5 long years to study Burns Creek, and we have had a parade of witnesses from both sides. We have found no excuse whatsoever for accepting the plan to spend \$48 million on a project which has nothing to do with reclamation but is primarily a power project—and a most uneconomic and highly unfeasible one at that.

Burns Creek is probably the most outstanding example—save for the Hanford reactor project—of the designs and aspirations of the public power crowd. Here was a deliberate attempt to inflict upon the taxpayers a costly and extravagant proposal that admittedly has no value other than in the production of electric power. As such, its principal effect would be to create unemployment and extend economic distress. Oh, by putting \$48 million—and you can be sure that the cost would skyrocket before the project was completed—into this sort of thing, you can get a lot of people into temporary jobs. If half of the estimated investment were to be spent for wages and it took 3 years to build Burns Creek, 2,000 men could realize an income of \$4,000 each for that period. Then, after the last hopper of cement dried and the generators were ready to begin



whirring, the men who make their living without Federal subsidy would begin to feel the pinch.

The Burns Creek project was designed with a capacity of 90,000 kilowatts and would dilute the amount of coal consumed in the area by 250,000 tons per year, thus creating a loss of \$275 million in mine payroll and a \$100,000 annual reduction in payment to the United Mine Workers of America welfare fund. Burns Creek has been strongly opposed by both the United Mine Workers of America and the coal industry, as have myriad of public power projects that are coming before us all the time.

Burns Creek would be another link in the national power network that has been on the drawing board of the public power group for many years.

Incidentally, the Senate version of the public works omnibus bill contains projects totaling more than 2,800,000 kilowatts of installed capacity—enough to displace almost 9 million tons of coal annually. The total cost of these projects is \$1,350,700,000.

Fortunately, Congress took the steps necessary to remove from consideration the project that would have been a key to all-out realization of the public power program. By insisting that the atomic energy authorization bill be amended to preclude the Federal Government from assuming any liability in the construction or operation of the atomic generating plant at Hanford, Wash., the 87th Congress established a precedent which we hope succeeding Congresses will retain and apply to other public power proposals. Parenthetically I remind my colleagues that the Hanford project was referred to by the United Mine Workers Journal as "a new scheme to defraud the taxpayers." Since, however, it was agreed to permit the Atomic Energy Commission, the Bonneville Power Administration, and the Washington Public Power Supply System to enter into the negotiations for so-called private construction of a generating plant at Hanford, Congress must watch closely to see that its will is not circumvented through loans from such agencies as the Housing and Home Finance Corporation, the Rural Electrification Administration, and/or other Federal offices.

Hanford would have had an 800,000 kilowatt capacity. Add these and the scores of other public power projects already in existence and in the dream stage, and there would be enough electricity available to close half the coal mines in the United States. I am not exaggerating. Down at the Department of Interior you will find a map on which existing and projected transmission lines encircle this land from Washington to California to Florida and Maine and back again, with interties crossing every single region of the country. With the sharp increase in the efficiency of long-distance transmission lines, it would be possible to bring electricity from hydroelectric plants and atomic energy generating stations right into the very heart of the coalfields. Yesterday, Assistant Secretary of the Interior Holum included this statement in an address before a cooperative association in South Dakota:

A five-man task force has completed its study and report on the proposed Pacific Northwest-Pacific Southwest intertie. The technical significance of the report itself has been extremely noteworthy because it establishes that d.c. transmission makes possible and economic the transmission of energy between points 1,000 and 2,000 miles apart. The electric load in Chicago is within practical transmission distance of the cheap lignite fuels in the Dakotas.

To complete this analysis, Mr. Holum could have pointed out that every coal-consuming center in the United States is within deliverable distance of electric energy from hydro projects. Every city and community in Pennsylvania is within a thousand miles of the hydroelectric plants on the Niagara River, in the Tennessee Valley, and within the periphery of the Southeast Power Administration. If Mr. Holum is correct in stating that economic transmission of energy is now economic over distances up to 2,000 miles, then Philadelphia public utility coal markets could expect to be offered subsidized service from waterpowered generating stations in the Missouri River Basin and in the Fryingpan-Arkansas project approved by this Congress this year.

He, incidentally, mentioned, in the course of his remarks, some of the super plans which his Department has in store in the way of creating unemployment in the coalfields through hydroelectric projects. The Bureau of Reclamation alone undertook construction of hydroelectric plants in 1962 that will have a total capacity of 1,857,900 kilowatts. As a consequence, the coal industry will lose about 6 million tons of business, with a wage loss of \$12 million to miners. For the United Mine Workers welfare fund, this tonnage would amount to \$2,400,000. These losses, I remind you, are a result of Bureau of Reclamation activities exclusively. They do not include Army Engineers projects or the Government-sponsored atomic energy power projects, all of which serve to enhance the labor losses brought about by these subsidized miner-displacement programs. If the network of public powerlines were ever to become a reality, today's conditions in surplus labor areas of mining States would seem ultra prosperous by comparison. A growing number of coalminers would join the queues at unemployment compensation counters, with thousands of railroaders now working on coal-carrying roads standing beside them. The depressing economic force would affect railroad shops, local business houses, and every community in central and western Pennsylvania as well as in all other coal producing States.

I am confident that we are not going to permit Burns Creek to be restored to the omnibus public works bill. I am certain that the Members of Congress on both sides of the aisle who rejected this proposed monument to waste will not change their position merely because the public power gang is trying to catch us in a vote-for-anything mood as the curtain is lowered on the 87th Congress. Members of Congress from both parties who recognize the danger that Burns Creek and associated projects hold for the

American economic and social order, will have no more of Burns Creek or anything else that resembles it.

#### CORRECTION OF RECORD

Mr. GROSS. Mr. Speaker, on October 8, 1962, at page 21626 of the RECORD, I am represented as referring to the minority whip of the other body. It should have been the majority whip of the other body. I ask unanimous consent that the permanent RECORD be corrected accordingly.

The SPEAKER. Is there objection to the request of the gentleman from Iowa? There was no objection.

#### TRIBUTE TO HON. BURR P. HARRISON

(Mr. KEOGH asked and was given permission to extend his remarks at this point in the RECORD.)

Mr. KEOGH. Mr. Speaker, as this, the 87th Congress, draws to a close and as we pause to reflect on the events of the days just passed, I cannot fail to take this means of expressing my deep regret that one of our most respected, admired, and beloved colleagues in the House of Representatives is retiring after completion of this session.

The gentleman from Virginia, BURR POWELL HARRISON, is one of those rare individuals about whom one can truly say that "this place is better for his having passed this way" in his journey through life. In him are combined those qualities of greatness which are given to so few but which benefit so many. He is possessed of a big heart, a gentle and modest manner, a kind and generous disposition, a humility and respect for his fellow man, as well as those attributes of sharpness of mind, tenacity of purpose, and soundness of judgment found only in the greatest of our public servants. He is at once a historian and a scholar, a lawyer and a judge, a legislator and a statesman. He has been my friend and will continue to be, I hope, for many years.

BURR HARRISON's public record in this House will stand the test of time and events. All of us who have had the privilege and honor of working with him know that his positions on legislative issues were never lightly taken nor easily assailed. In his service here, BURR HARRISON has contributed much that is great, much that is lasting, and much that is in the public interest of his State and Nation. The keenness of his political instincts is well known.

Because BURR occupied the seat next to me in the Committee on Ways and Means for more than a decade, I speak with some experience. I know the force of intellect, the background of history, and the soundness of judgment which he has brought to bear on the great issues of the day, particularly those which have fallen within the realm of the Committee on Ways and Means, such as our internal revenue laws, our Federal social security laws, unemployment compensation, tariffs, reciprocal trade, highway financing and all the other great fiscal



measures handled by the Committee on Ways and Means.

Our good friend, BURR, has never hesitated to measure swords or enter the lists against those forces or causes which he thought to be wrong in principle or result and he has been both steadfast in support and eloquent in his oratory in expressing himself in behalf of those things he believed to be right.

He is one who fills with honor, dignity and high intelligence the seat which was filled years before him by his father. His is the second generation of service in this body representing the same district of the great Commonwealth of Virginia, and one can truly say that BURR HARRISON is wise in his generation and is a public servant deserving of emulation by those who follow him.

He has a keen good humor and an invariable sparkle in his eye. As one who has on occasion felt the razor edge of his wit and his lightning mind, I say that this quality is one which we shall all remember well and which we shall miss from day to day after he leaves this House for other endeavors.

I know I speak the sentiments of every member of the Committee on Ways and Means on both sides of the aisle when I say to him that we will always welcome him and we hope that we will often have the benefit of your advice and counsel during the months and years to come. As he returns to the practice of law which he entered in 1926, and from which he became State's attorney, State senator, circuit court judge and then Representative of the Seventh District of Virginia, we all express to him our regret that he has concluded voluntarily and for personal reasons, his service in the House, but we extend to him sincere best wishes in all of his future endeavors.

#### PRESIDENT'S POLITICAL HARANGUES WON'T SOLVE NATION'S PROBLEMS

(Mr. CURTIS of Missouri asked and was given permission to extend his remarks at this point in the RECORD.)

Mr. CURTIS of Missouri. Mr. Speaker, this past weekend President Kennedy was campaigning in Michigan and Minnesota for the election of a Democratic Congress.

I was amazed and disturbed by a newspaper report on the theme which the President is adopting in his political speeches. According to the Wall Street Journal of October 8—

Current economic problems either are laid at the door of the Eisenhower administration or blamed on obstruction by Republican Congressmen. Unemployment may be high but it's down from the fall of 1960; the rate of economic growth is bad now, but has been too low "for the past 5 years;" and the economy is operating far below potential because Congress won't enact "the kind of program which will make it possible for this very rich country of ours to fulfill its promise."

There are two things in particular about this report which I find disturbing. In the first place, the President's assertion that unemployment is down from the fall of 1960 is misleading, to

say the least. In September 1962, the seasonally adjusted rate of unemployment was 5.8 percent. In September of 1960, the rate was 5.7 percent. If we look at the actual unadjusted number of unemployed persons, we find that this September there were over 3.5 million jobless men and women, while in September of 1960 there were somewhat less than 3.4 million. In other words, there are about 125,000 more people unemployed today than in September of 1960. In effect, the unemployment situation is virtually unchanged.

But there is one big difference between September 1960 and September 1962. Today—or at least so the President has repeatedly said—we are riding the crest of a prosperity wave. By contrast, we were on the way down the business cycle in September 1960, and actually hit bottom in February 1961.

In other words, we have about as many unemployed during this so-called Kennedy prosperity as we did approaching the bottom of the 1960-61 recession. The big question now is what kind of an unemployment rate are we going to have in the next recession, which some economists now say is only months away?

Notwithstanding the President's assurances of the progress we have made, I am deeply disturbed at the prospect of an unemployment rate more severe than any we have seen since the early 1940's. Clearly, the President has failed to deliver on his campaign promise made on October 15, 1960 in Sharon, Pa., to "move at once to put our people back to work."

The Wall Street Journal also reported that President Kennedy now blames his economic failures on Congress, which, he says, will not enact "the kind of program which will make it possible for this very rich country of ours to fulfill its promise."

The President has certainly puzzled me and, I am sure, many other Americans by his sudden about-face on whether this has been a productive or an unproductive Congress. As recently as August 13, in his television address to the Nation, he said:

This Congress has done more in the last 18 months to combat the recession and strengthen the economy than any Congress since the end of the Second World War.

Which is it, Mr. President? Is your overwhelmingly Democratic Congress a good one, which presumably does not need more Democrats to carry out your programs? Or, is your overwhelmingly Democratic Congress a bad Congress, in which case it could use some more Republicans? I think the country deserves a clear and straightforward answer.

Instead of spending his time belaboring the Republican minority for the failures of his Democratic Congress, the President could better serve the country by discussing and encouraging debate on his program to get this country moving again.

In the area of employment and unemployment, I think this country is sadly behind the times in its thinking. We are living in a dynamic and technologically advancing economy in which millions of jobs are becoming obsolete while

millions of new jobs are opening up. There are about as many jobs going begging today as there are unemployed men and women.

This unemployment is not caused by inadequate demand—as the President and his advisers maintain. Their prescription of more Government spending to spur demand does not solve the unemployment problem, but it does hamper the search for a genuine solution and results in retarding our economic growth.

Our task is to upgrade the skills of our people through a vast national public-private program of education and training. In addition, we must improve our economic statistics and try to identify job vacancies and skill needs. Along with this we should set up a national clearinghouse which will make this information readily available to the job-seeker. We should also make certain changes in our tax laws and in our unemployment insurance system which will encourage training and retraining and greater voluntary mobility of the labor force.

With so many subjects of deep importance to our people to discuss, it is a pity that the President has chosen to launch out on this political vendetta. Political harangues, after all, are not going to put the unemployed back to work or speed up this country's economic growth.

#### DEBT MANAGEMENT

(Mr. CURTIS of Missouri asked and was given permission to extend his remarks at this point in the RECORD.)

Mr. CURTIS of Missouri. Mr. Speaker, both the Ways and Means Committee and the Joint Economic Committee held hearings in July on the question of whether or not we should have a quickie tax cut in order to stimulate our economy.

I asked most of the witnesses with some monotony how they figured that a tax cut in face of a budget already out of balance would stimulate our economy in light of the fact that any tax cut would immediately create added problems in the field of debt management.

I was shocked to find not one witness, even Dr. Heller, the chairman of the President's Council for Economic Advisers, had given serious consideration in their prepared statements to the problems of debt management. The response of the witnesses to my question of what debt management problems would be presented and the economic impact of solving these debt management problems might be, was clearly a matter of momentary improvising and not the result of considered thinking and judgment.

Perhaps it is only the members of the Ways and Means Committee and the Treasury Department who have to think of how we are to market our Federal bonds when we spend more money than we collect in taxes. Maybe that is why so many people are willing to go along with the President in treating deficit financing and further Federal debt as a matter of little consequence, a shibboleth, a piece of outmoded thinking.









# Digest of CONGRESSIONAL PROCEEDINGS

## OF INTEREST TO THE DEPARTMENT OF AGRICULTURE

OFFICE OF  
BUDGET AND FINANCE

(For information only;  
should not be quoted  
or cited)

Issued Oct. 15, 1962

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87th-2nd, Nos. 188 &  
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**HIGHLIGHTS:** October 12: Sen. Hartke commended legislation to increase Farmers Home loan authority. Sen. McNamara commended appropriation for poultry research facilities in Mich. Sen. Proxmire urged increased consumption of dairy products. Sen. Morse defended REA cooperatives. Rep. Cannon objected to sending supplemental appropriation bill to conference. House agreed to conference report on public works appropriation bill. Sen. Javits introduced and discussed measure to establish Commission on Revision of Federal Agricultural Laws and Programs.

October 13: Sen. Morse criticized feed grain differentials for Northwest. Senate agreed to Sen. Russell's resolution favoring additional funds for industrial utilization research. Senate agreed to resolution asserting its power to originate appropriation bills. Both Houses agreed to amendments in disagreement on public works appropriation bill. Rep. Saylor criticized general manager of National Rural Electric Cooperatives Association. Rep. Hoeven criticized farm program.

### HOUSE - Oct. 12. "

1. SUPPLEMENTAL APPROPRIATION BILL, 1963. Rep. Cannon objected to a unanimous consent request to send to conference this bill, H. R. 13290 (p. 22120). Earlier a similar request was withdrawn (pp. 22099-100).
2. PUBLIC WORKS APPROPRIATION BILL, 1963. Agreed to the conference report on this bill, H. R. 12900, but did not complete action on amendments reported in



disagreement. pp. 22154-6

3. **TARIFFS.** Concurred in the Senate amendments to H. R. 12820, to validate the coverage of certain State and local employees in Arkansas under the agreement entered into by such State under the Social Security Act. As amended, this bill includes the language of H. R. 12109, to amend the Tariff Act of 1930 to permit certain natural grasses and other natural materials to be imported free of duty. This bill will now be sent to the President. pp. 22100-1
4. **GOLDEN EAGLE.** Concurred in the Senate amendments to H. J. Res. 489, to provide protection for the golden eagle. This bill will now be sent to the President. pp. 22102-3
5. **PERSONNEL.** Rep. Johansen urged a reduction in the number of Federal employees and said, "I wish the President every success in his new crusade to whittle the bureaucracy down to size." p. 22107
6. **PUBLIC WORKS.** Received and agreed to the conference report on H. R. 13273, the omnibus rivers, harbors and flood control bill (H. Rept. 2557), pp. 22131-48, 22156

SENATE - Oct. 12

7. **FARM LOANS.** Sen. Mansfield inserted Sen. Hartke's statement reviewing accomplishments of the Farmers Home Administration loan program and commending the enactment of legislation to increase certain insured-loan authority from \$150 million to \$200 million. pp. 22065-6
8. **POULTRY RESEARCH.** Sen. McNamara commended the inclusion of \$450,000 in the USDA appropriation bill for poultry research facilities in East Lansing, Mich., and inserted a letter from this Department listing grants received in support of such research. p. 22046
9. **DAIRY PRODUCTS.** Sen. Proxmire criticized "food faddists ... who have said that butter can be dangerous to health," urged increased consumption of dairy products, and inserted an article, "Antifat Food Fad Assailed by AMA." pp. 22029-30
10. **ELECTRIFICATION.** Sen. Morse defended rural electric cooperatives against charges that they have unfair advantage of private utilities because of lower taxes and the ability to borrow money from the Treasury at 2 percent, and inserted several items on the controversy. pp. 22085-9
11. **FARM PROGRAM; LEGISLATIVE RECORD.** Sen. Mansfield inserted his summary of the legislative record for the 87th Congress, including activities relating to agriculture, foreign trade, natural resources, and other fields. pp. 22018-29
12. **FOREIGN TRADE.** Sen. Proxmire commended the President's action in imposing restrictions on the use of U. S. ports or the carrying of U. S. cargo by vessels of foreign nations trading with Cuba. pp. 22038-40

HOUSE - Oct. 13

13. **APPROPRIATIONS.** Rep. Cannon inserted a summary of the appropriations for 1963. pp. 22208-17



## OMNIBUS RIVERS AND HARBORS AND FLOOD CONTROL ACT OF 1962

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OCTOBER 12, 1962.—Ordered to be printed

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Mr. DAVIS of Tennessee, from the committee of conference,  
submitted the following

### CONFERENCE REPORT

[To accompany H.R. 13273]

The committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H.R. 13273) authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the House recede from its disagreement to the amendment of the Senate and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the Senate amendment insert the following:

#### TITLE I—RIVERS AND HARBORS

*SEC. 101. That the following works of improvement of rivers and harbors and other waterways for navigation, flood control, and other purposes are hereby adopted and authorized to be prosecuted under the direction of the Secretary of the Army and supervision of the Chief of Engineers, in accordance with the plans and subject to the conditions recommended by the Chief of Engineers in the respective reports hereinafter designated: Provided, That the provisions of section 1 of the River and Harbor Act approved March 2, 1945 (Public Law Numbered 14, Seventy-ninth Congress, first session), shall govern with respect to projects authorized in this title; and the procedures therein set forth with respect to plans, proposals, or reports for works of improvement for navigation or flood control and for irrigation and purposes incidental thereto, shall apply as if herein set forth in full:*

## NAVIGATION

*Narraguagus River, Maine: House Document Numbered 530, Eighty-seventh Congress, at an estimated cost of \$500,000;*

*Carvers Harbor, Vinalhaven, Maine: Senate Document Numbered 118, Eighty-seventh Congress, at an estimated cost of \$205,000;*

*Searsport Harbor, Maine: House Document Numbered 500, Eighty-seventh Congress, at an estimated cost of \$700,000;*

*Portland Harbor Maine: House Document Numbered 216, Eighty-seventh Congress, at an estimated cost of \$8,340,000;*

*Kennebunk River, Maine: House Document Numbered 459, Eighty-seventh Congress, at an estimated cost of \$270,000;*

*Portsmouth Harbor and Piscataqua River, Maine and New Hampshire: House Document Numbered 482, Eighty-seventh Congress, at an estimated cost of \$7,500,000;*

*Gloucester Harbor, Massachusetts: House Document Numbered 341, Eighty-seventh Congress, at an estimated cost of \$1,100,000;*

*Marblehead Harbor, Massachusetts: House Document Numbered 516, Eighty-seventh Congress, at an estimated cost of \$1,752,000;*

*Chelsea Harbor, Massachusetts: House Document Numbered 350, Eighty-seventh Congress, at an estimated cost of \$2,843,000;*

*Dorchester Bay and Neponset River, Massachusetts: Senate Document Numbered 126, Eighty-seventh Congress, at an estimated cost of \$7,050,000;*

*Plymouth Harbor, Massachusetts: Senate Document Numbered 124, Eighty-seventh Congress, at an estimated cost of \$1,200,000;*

*Pawtuxet Cove, Rhode Island: House Document Numbered 236, Eighty-seventh Congress, at an estimated cost of \$210,000;*

*Great Lakes to Hudson River Waterway, New York: River and Harbor Committee Document Numbered 20, Seventy-third Congress, for the further partial accomplishment of the approved plan there is hereby authorized to be appropriated, in addition to sums previously authorized, \$1,000,000;*

*Little Neck Bay, New York: House Document Numbered 510, Eighty-seventh Congress, at an estimated cost of \$2,185,000;*

*Flushing Bay and Creek, New York: House Document Numbered 551, Eighty-seventh Congress, at an estimated cost of \$1,695,000;*

*Buttermilk Channel, New York: House Document Numbered 483, Eighty-seventh Congress, at an estimated cost of \$2,226,000;*

*Newark Bay, Hackensack and Passaic Rivers, New Jersey (channels to Port Elizabeth): Modification of the existing navigation project authorized by the River and Harbor Act of 1954 (Public Law 780, Eighty-third Congress), House Document Numbered 252, is hereby authorized substantially in accordance with the plans being prepared by the Chief of Engineers, subject to the approval of such plans by the Secretary of the Army and the President;*

*Raritan River, New Jersey: House Document Numbered 455, Eighty-sixth Congress, maintenance;*

*Lynnhaven Inlet, Bay, and connecting waters, Virginia: House Document Numbered 580, Eighty-seventh Congress, at an estimated cost of \$1,068,000: Provided, That nothing in this Act shall be construed as authorizing reimbursement to local interests for the Long Creek-Broad Bay Canal Bridge;*

*James River, Virginia: House Document Numbered 586, Eighty-seventh Congress, at an estimated cost of \$39,000,000: Provided, That*



*this authorization shall expire after a period of five years from the date of approval of this Act unless the Governor of Virginia has endorsed the project within that time: And provided further, That prior to construction, there will be submitted to the Congress a feasibility report which takes account of possible adverse effects of the project on seed oyster production;*

*Rollinson Channel and channel from Hatteras Inlet to Hatteras, North Carolina: House Document Numbered 457, Eighty-seventh Congress, at an estimated cost of \$652,000;*

*Wilmington Harbor, North Carolina: Senate Document Numbered 114, Eighty-seventh Congress, at an estimated cost of \$6,370,000;*

*Savannah Harbor, Georgia: Senate Document Numbered 115, Eighty-seventh Congress, at an estimated cost of \$605,000;*

*Canaveral Harbor, Florida: Senate Document Numbered 140, Eighty-seventh Congress, at the estimated cost of \$5,076,000;*

*Key West Harbor, Florida: Senate Document Numbered 106, Eighty-seventh Congress, at an estimated cost of \$820,000;*

*Tampa Harbor, Port Sutton and Ybor Channels, Florida: House Document Numbered 529, Eighty-seventh Congress, at an estimated cost of \$997,000;*

*Walter F. George lock and dam, Alabama: Senate Document Numbered 109, Eighty-seventh Congress, at an estimated cost of \$500,000;*

*Pensacola Harbor, Florida: House Document Numbered 528, Eighty-seventh Congress, at an estimated cost of \$424,000;*

*Holt lock and dam, Alabama: The Secretary of the Army is hereby authorized and directed to cause an immediate study to be made under the direction of the Chief of Engineers with a view to providing hydroelectric power generating facilities in said dam, and his report on such study shall be submitted to the Congress by the Secretary of the Army within the first period of sixty calendar days of continuous session of the Eighty-eighth Congress;*

*Pascagoula Harbor, Mississippi: House Document Numbered 560, Eighty-seventh Congress, at an estimated cost of \$4,870,000;*

*Mississippi River, Baton Rouge to Gulf of Mexico, Louisiana: Senate Document Numbered 36, Eighty-seventh Congress, at an estimated cost of \$357,000;*

*The project, Mississippi River, Baton Rouge to the Gulf of Mexico, barge channel through Devils Swamp, Louisiana (Baton Rouge Harbor), authorized by the River and Harbor Act of 1946, in accordance with the recommendations of the Chief of Engineers in House Document Numbered 321, Eightieth Congress, as amended by the Flood Control Act of 1948, is hereby further amended to provide for the provision as required, of suitable dikes and other retaining structures at a Federal cost of \$299,500, for the construction and future maintenance of the project, in order to provide additional industrial sites with water frontage which are now needed to permit the normal development and expansion of the industrial and commercial activities of the locality: Provided, That local interests contribute the sum of \$100,500 toward the cost of the work;*

*Bayous Terrebonne, Petit Caillou, Grand Caillou, Du Large, and connecting channels, Louisiana, and Atchafalaya River, Morgan City to Gulf of Mexico: House Document Numbered 583, Eighty-seventh Congress, at an estimated cost of \$45,000;*

*Gulf Intracoastal Waterway, Louisiana and Texas: House Document Numbered 556, Eighty-seventh Congress, at an estimated cost of \$25,540,000: Provided, That the authority to make such modifications as in the*

discretion of the Chief of Engineers may be advisable, as set forth in House Document Numbered 556, Eighty-seventh Congress, shall be interpreted to apply to, but not limited to, the improvement of the existing channels at proposed channel relocation sites in lieu of such relocations;

Calcasieu River salt water barrier, Louisiana: House Document Numbered 582, Eighty-seventh Congress, at an estimated cost of \$3,310,000: Provided, That the Corps of Engineers is directed to study the question of cost sharing taking into account that measures for mitigation of damages from navigation improvements will be a Federal responsibility and enhancement effects will be shared on the basis of a 50 per centum Federal and 50 per centum non-Federal; such cost sharing is hereby authorized as determined to be feasible and justified by the Chief of Engineers and Secretary of the Army within the first period of sixty calendar days of continuous session of the Congress after the date on which the report is submitted to it unless such report is disapproved by the Congress;

Mississippi River at Clarksville, Missouri: House Document Numbered 552, Eighty-seventh Congress, at an estimated cost of \$103,300;

Sandy Slough, Lincoln County, Missouri: House Document Numbered 419, Eighty-seventh Congress, at an estimated cost of \$195,000;

Sabine-Neches Waterway, Texas: House Document Numbered 553, Eighty-seventh Congress, at an estimated cost of \$20,830,000;

Trinity River, Wallisville Reservoir, Texas: House Document Numbered 215, Eighty-seventh Congress, at an estimated cost of \$9,162,000: Provided, That nothing in this Act shall be construed as authorizing the acquisition of additional lands for establishment of a national wildlife refuge at the reservoir;

Gulf Intracoastal Waterway, channel to Palacios, Texas: House Document Numbered 504, Eighty-seventh Congress, at an estimated cost of \$818,000;

Gulf Intracoastal Waterway, channel to Victoria, Texas: House Document Numbered 288, Eighty-seventh Congress, at an estimated cost of \$1,590,000;

Illinois Waterway, Illinois and Indiana: House Document Numbered 31, Eighty-sixth Congress, is approved and there is hereby authorized the sum of \$40,000,000 for initiation and partial accomplishment of the project;

Kaskaskia River, Illinois: Senate Document Numbered 44, Eighty-seventh Congress, at an estimated cost of \$58,200,000;

Mississippi River between Missouri River and Minneapolis, Minnesota: House Document Numbered 513, Eighty-seventh Congress, at an estimated cost of \$1,205,000;

Ontonagon Harbor, Michigan: House Document Numbered 287, Eighty-seventh Congress, at an estimated cost of \$4,741,000;

Muskegon Harbor, Michigan: House Document Numbered 474, Eighty-seventh Congress, at an estimated cost of \$609,000;

Leland Harbor, Michigan: House Document Numbered 413, Eighty-seventh Congress, at an estimated cost of \$485,000;

Little Bay De Noc, Gladstone Harbor and Kipling, Michigan: House Document Numbered 480, Eighty-seventh Congress, at an estimated cost of \$350,000;

Green Bay Harbor, Wisconsin: House Document Numbered 470, Eighty-seventh Congress, at an estimated cost of \$4,270,000;

Kenosha Harbor, Wisconsin: House Document Numbered 496,



*Eighty-seventh Congress, at an estimated cost of \$673,000;*

■ *Manitowoc Harbor, Wisconsin: House Document Numbered 479, Eighty-seventh Congress, at an estimated cost of \$719,000;*

*Milwaukee Harbor, Wisconsin: House Document Numbered 134, Eighty-seventh Congress, at an estimated cost of \$4,029,000;*

*Chicago Harbor, Illinois: House Document Numbered 485, Eighty-seventh Congress, at an estimated cost of \$1,505,000;*

*Calumet Harbor and River, Illinois and Indiana: House Document Numbered 581, Eighty-seventh Congress, at an estimated cost of \$11,464,000;*

*New Buffalo Harbor, Michigan: House Document Numbered 481, Eighty-seventh Congress, at an estimated cost of \$667,000;*

*Caseville Harbor, Michigan: House Document Numbered 64, Eighty-seventh Congress, at an estimated cost of \$327,000;*

*Saginaw River, Michigan: House Document Numbered 544, Eighty-seventh Congress, at an estimated cost of \$4,780,000;*

*Rouge River, Michigan: House Document Numbered 509, Eighty-seventh Congress, at an estimated cost of \$257,000;*

*Huron Harbor, Ohio: House Document Numbered 165, Eighty-seventh Congress, at an estimated cost of \$8,557,000;*

*Cleveland Harbor, Ohio: House Document Numbered 527, Eighty-seventh Congress, at an estimated cost of \$888,000;*

*Conneaut Harbor, Ohio: House Document Numbered 415, Eighty-seventh Congress, at an estimated cost of \$6,179,000;*

*Erie Harbor, Pennsylvania: House Document Numbered 340, Eighty-seventh Congress, at an estimated cost of \$671,000;*

*Buffalo Harbor, New York: House Document Numbered 451, Eighty-seventh Congress, at an estimated cost of \$2,797,000;*

*Great Sodus Bay Harbor, New York: House Document Numbered 138, Eighty-seventh Congress, at an estimated cost of \$765,000;*

*Oswego Harbor, New York: House Document Numbered 471, Eighty-seventh Congress, at an estimated cost of \$1,180,000;*

*Dana Point Harbor, California: House Document Numbered 532, Eighty-seventh Congress, at an estimated cost of \$3,730,000;*

*Santa Barbara Harbor, California: House Document Numbered 518, Eighty-seventh Congress, at an estimated cost of \$3,000,000;*

*Oakland Harbor, California, Fruitvale Avenue Bridge: Senate Document Numbered 75, Eighty-seventh Congress, at an estimated cost of \$1,750,000;*

*Oakland Harbor, California: House Document Numbered 353, Eighty-seventh Congress, at an estimated cost of \$6,775,000;*

*Noyo River and Harbor, California: Senate Document Numbered 121, Eighty-seventh Congress, at an estimated cost of \$13,231,000;*

*Columbia and Lower Willamette Rivers, Oregon and Washington: House Document Numbered 203, Eighty-seventh Congress, at an estimated cost of \$493,000;*

*Columbia and Lower Willamette Rivers below Vancouver, Washington, and Portland, Oregon: House Document Numbered 452, Eighty-seventh Congress, at an estimated cost of \$20,100,000;*

*Tacoma Harbor, Port Industrial and Hylebos Waterways, Washington: Senate Document Numbered 104, Eighty-seventh Congress, at an estimated cost of \$2,460,000;*

*Kingston Harbor, Washington: House Document Numbered 417, Eighty-seventh Congress, at an estimated cost of \$428,000;*

*Swinomish Channel, Washington: House Document Numbered 499, Eighty-seventh Congress, at an estimated cost of \$887,000;*

*Kaunakakai Harbor, Molokai, Hawaii: House Document Numbered 484, Eighty-seventh Congress, at an estimated cost of \$7,919,000;*

*The project for Hilo Harbor, Hawaii, authorized by Public Law 645, Eighty-sixth Congress, is hereby modified to provide for adjustment of the cash contribution required of local interest in accordance with recommendations by the Secretary of the Army and approved by the President, such adjustment to be made at the earliest practicable date.*

#### BEACH EROSION

*State of New Hampshire: House Document Numbered 416, Eighty-seventh Congress, at an estimated cost of \$88,000;*

*Fire Island Inlet and shore westerly to Jones Inlet, Long Island, New York: Modification of the existing beach erosion control project authorized by the River and Harbor Act of 1958 (Public Law 500, Eighty-fifth Congress), House Document Numbered 411, Eighty-fifth Congress, is hereby authorized substantially in accordance with the plans which will include a sand bypassing system at Fire Island Inlet, being prepared by the Chief of Engineers, subject to the approval of such plans by the Secretary of the Army and the President;*

*Clark Point, New Bedford, Massachusetts: House Document Numbered 584, Eighty-seventh Congress, at an estimated cost of \$60,000;*

*Virginia Beach, Virginia: House Document Numbered 382, Eighty-seventh Congress, periodic nourishment;*

*Fort Macon, Atlantic Beach and vicinity, North Carolina: House Document Numbered 555, Eighty-seventh Congress, at an estimated cost of \$194,000;*

*Palm Beach County from Martin County line to Lake Worth Inlet and from South Lake Worth Inlet to Broward County line, Florida: House Document Numbered 164, Eighty-seventh Congress, at an estimated cost of \$128,800;*

*Virginia Key and Key Biscayne, Florida: House Document Numbered 561, Eighty-seventh Congress, at an estimated cost of \$220,000;*

*San Juan and vicinity, Puerto Rico: House Document Numbered 575, Eighty-seventh Congress, at an estimated cost of \$65,400;*

*Lake Erie shoreline from the Michigan-Ohio State line to Marblehead, Ohio: House Document Numbered 63, Eighty-seventh Congress, at an estimated cost of \$658,500;*

*Sheffield Lake community park, Sheffield Lake Village, Ohio: House Document Numbered 414, Eighty-seventh Congress, at an estimated cost of \$100,300;*

*Ventura-Pierpont area, California: House Document Numbered 458, Eighty-seventh Congress, at an estimated cost of \$515,000.*

*Orange County, California, House Document Numbered 602, Eighty-seventh Congress, at an estimated cost of \$2,845,000.*

*SEC. 102. That the Secretary of the Army is hereby authorized to reimburse local interests for such work done by them on the beach erosion projects authorized in section 101, and in other sections of this Act, subsequent to the initiation of the cooperative studies which form the basis for the projects: Provided, That the work which may have been done on these projects is approved by the Chief of Engineers as being in accordance with the projects herein adopted: Provided further, That such*



reimbursement shall be subject to appropriations applicable thereto or funds available therefor and shall not take precedence over other pending projects of higher priority for improvements.

SEC. 103. (a) The Act approved August 13, 1946, as amended by the Act approved July 28, 1956 (33 U.S.C. 426e-h), pertaining to shore protection, is hereby further amended as follows:

(1) the word "one-third" in section 1(b) is deleted and the word "one-half" is substituted therefor;

(2) the following is added after the word "located" in section 1(b):  
 ", except that the costs allocated to the restoration and protection of Federal property shall be borne fully by the Federal Government, and, further, that Federal participation in the cost of a project for restoration and protection of State, county, and other publicly owned shore parks and conservation areas may be, in the discretion of the Chief of Engineers, not more than 70 per centum of the total cost exclusive of land costs, when such areas: Include a zone which excludes permanent human habitation; include but are not limited to recreational beaches; satisfy adequate criteria for conservation and development of the natural resources of the environment; extend landward a sufficient distance to include, where appropriate, protective dunes, bluffs, or other natural features which serve to protect the uplands from damage; and provide essentially full park facilities for appropriate public use, all of which shall meet with the approval of the Chief of Engineers";

(3) the following is added after the word "supplemented" in section 1(e):  
 ", or, in the case of a small project under section 3 of this Act, unless the plan therefor has been approved by the Chief of Engineers"; and

(4) sections 2 and 3 are amended to read as follows:

"SEC. 2. The Secretary of the Army is hereby authorized to reimburse local interests for work done by them, after initiation of the survey studies which form the basis for the project, on authorized projects which individually do not exceed \$1,000,000 in total cost: Provided, That the work which may have been done on the projects is approved by the Chief of Engineers as being in accordance with the authorized projects: Provided further, That such reimbursement shall be subject to appropriations applicable thereto or funds available therefor and shall not take precedence over other pending projects of higher priority for improvements.

"SEC. 3. The Secretary of the Army is hereby authorized to undertake construction of small shore and beach restoration and protection projects not specifically authorized by Congress, which otherwise comply with section 1 of this Act, when he finds that such work is advisable, and he is further authorized to allot from any appropriations hereafter made for civil works, not to exceed \$3,000,000 for any one fiscal year for the Federal share of the costs of construction of such projects: Provided, That not more than \$400,000 shall be allotted for this purpose for any single project and the total amount allotted shall be sufficient to complete the Federal participation in the project under this section including periodic nourishment as provided for under section 1(c) of this act: Provided further, That the provisions of local cooperation specified in section 1 of this Act shall apply: And provided further, That the work shall be complete in itself and shall not commit the United States to any additional improvement to insure its successful operation, except for participation in periodic beach nourishment in accordance with section 1(c) of this Act, and as

may result from the normal procedure applying to projects authorized after submission of survey reports."

(b) All provisions of existing law relating to surveys of rivers and harbors shall apply to surveys relating to shore protection and section 2 of the River and Harbor Act approved July 3, 1930, as amended (33 U.S.C. 426), is modified to the extent inconsistent herewith.

(c) The cost-sharing provisions of this Act shall apply in determining the amounts of Federal participation in or payments toward the costs of authorized projects which have not been substantially completed prior to the date of approval of this Act, and the Chief of Engineers, through the Beach Erosion Board, is authorized and directed to recompute the amounts of Federal contribution toward the costs of such projects accordingly.

SEC. 104. The project for aquatic plant control authorized by the River and Harbor Act of 1958 (72 Stat. 297, 300) is hereby modified to provide that research costs and planning costs prior to construction shall be borne fully by the United States and shall not be included in the cost to be shared by local interests.

SEC. 105. The Secretary of the Army is authorized to convey 17.94 acres of land located at old lock and dam numbered 7, Ohio River, to the city of Midland, Pennsylvania, after November 1, 1962, for public park and recreation purposes, without monetary consideration but subject to reversion to the United States if not utilized for public park and recreation purposes and further subject to such flowage rights as may be necessary in the operation of the New Cumberland lock and dam, Ohio River.

SEC. 106. Section 110(f) of the River and Harbor Act of 1958 (72 Stat. 297) is amended by changing the period to a comma and adding the following: "and upon completion of transfer to the said State of all right, title, and interest of the United States in and to the canal in accordance with the agreement executed December 14, 1960, between the Chief of Engineers and the representatives of said State, the additional sum of \$800,000 is hereby authorized to be appropriated to be expended by the Corps of Engineers, or by said State, for the repair and modification of any canal properties and appurtenances, notwithstanding the provisions of section 110(b) hereof."

SEC. 107. The Secretary of the Army is authorized and directed to prepare and transmit to Congress, at the earliest practicable date, a compilation of survey and review reports on river and harbor and flood control improvements, similar to that prepared in accordance with the Act of March 4, 1913, revised in accordance with the Acts of July 3, 1930, August 30, 1935, and May 17, 1950, and printed in House Document Numbered 214, Eighty-second Congress, first session.

SEC. 108. The Chief of Engineers is authorized to perform such work as may be necessary to provide for the repair and restoration of lock and dam numbered 3 on the Big Sandy River: Provided, That the work authorized herein shall have no effect on the condition that local interests shall operate and maintain the structure and related properties as required by the Act of Congress approved August 6, 1956 (70 Stat. 1062): And provided further, That there is hereby authorized to be expended from appropriations hereafter made for civil functions administered by the Department of the Army, such funds as may be necessary for the repair and restoration of lock and dam numbered 3 on the Big Sandy River, not to exceed \$200,000.

SEC. 109. The body of water designated as the Redondo Beach Harbor, California, shall be known and designated hereafter as the Redondo Beach



*King Harbor, California.* Any law, regulation, map, document, record, or other paper of the United States in which such body of water is referred to shall be held to refer to it as the Redondo Beach King Harbor, California.

SEC. 110. The Secretary of the Army is hereby authorized and directed to cause surveys to be made at the following named localities and subject to all applicable provisions of section 110 of the River and Harbor Act of 1950:

*Falmouth Harbor, Maine.*

*Channel between Point Shirley and Deer Island, Massachusetts.*

*Little Egg Inlet, New Jersey.*

*Brigantine Inlet, New Jersey.*

*Corsons Inlet, New Jersey.*

*Kings Bay Deepwater Channel, Georgia.*

*Auglaize River at Wapakoneta, Ohio.*

Surveys of the coastal areas of the United States and its possessions, including the shores of the Great Lakes, in the interest of beach erosion control, hurricane protection and related purposes: Provided, That surveys of particular areas shall be authorized by appropriate resolutions of either the Committee on Public Works of the United States Senate or the Committee on Public Works of the House of Representatives.

SEC. 111. Title I of this Act may be cited as the "River and Harbor Act of 1962".

## TITLE II—FLOOD CONTROL

SEC. 201. Section 3 of the Act approved June 22, 1936 (Public Law Numbered 738, Seventy-fourth Congress), as amended by section 2 of the Act approved June 28, 1938 (Public Law Numbered 761, Seventy-fifth Congress), shall apply to all works authorized in this title except that for any channel improvement or channel rectification project, provisions (a), (b), and (c) of section 3 of said Act of June 22, 1936, shall apply thereto, and except as otherwise provided by law: Provided, That the authorization for any flood control project herein adopted requiring local cooperation shall expire five years from the date on which local interests are notified in writing by the Department of the Army of the requirements of local cooperation, unless said interests shall within said time furnish assurances satisfactory to the Secretary of the Army that the required cooperation will be furnished.

SEC. 202. The provisions of section 1 of the Act of December 22, 1944 (Public Law Numbered 534, Seventy-eighth Congress, second session), shall govern with respect to projects authorized in this Act, and the procedures therein set forth with respect to plans, proposals, or reports for works of improvement for navigation or flood control and for irrigation and purposes incidental thereto shall apply as if herein set forth in full.

SEC. 203. The following works of improvement for the benefit of navigation and the control of destructive floodwaters and other purposes are hereby adopted and authorized to be prosecuted under the direction of the Secretary of the Army and the supervision of the Chief of Engineers in accordance with the plans in the respective reports hereinafter designated and subject to the conditions set forth therein: Provided, That the necessary plans, specifications, and preliminary work may be prosecuted on any project authorized in this title with funds from appropriations hereafter made for flood control so as to be ready for rapid inauguration of a construction program: Provided further, That the projects authorized

*herein shall be initiated as expeditiously and prosecuted as vigorously as may be consistent with budgetary requirements: And provided further, That penstocks and other similar facilities adapted to possible future use in the development of hydroelectric power shall be installed in any dam authorized in this Act for construction by the Department of the Army when approved by the Secretary of the Army on the recommendation of the Chief of Engineers and the Federal Power Commission.*

#### NEW ENGLAND-ATLANTIC COASTAL AREA

*The project for hurricane-flood protection at Wareham-Marion, Massachusetts, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 548, Eighty-seventh Congress, at an estimated cost of \$3,811,500.*

*The project for navigation and hurricane-flood protection at Point Judith, Rhode Island, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 521, Eighty-seventh Congress, at an estimated cost of \$2,414,000.*

*The project for navigation and hurricane-flood control protection at Narragansett Pier, Rhode Island, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 195, Eighty-seventh Congress, at an estimated cost of \$1,152,000.*

#### LONG ISLAND SOUND AREA

*The project for hurricane-flood control protection at New London, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 478, Eighty-seventh Congress, at an estimated cost of \$2,401,000.*

*The project for hurricane-flood protection at Westport, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 412, Eighty-seventh Congress, at an estimated cost of \$217,000.*

*The project for hurricane-flood protection at Mystic, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 411, Eighty-seventh Congress, at an estimated cost of \$1,490,000.*

#### HOUSATONIC RIVER BASIN

*The project for flood protection on the Naugatuck River at Ansonia-Derby, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 437, Eighty-seventh Congress, at an estimated cost of \$5,620,000.*

#### HUDSON RIVER BASIN

*The project for flood protection on Rondout Creek and Wallkill River and their tributaries, New York and New Jersey, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 113, Eighty-seventh Congress, at an estimated cost of \$5,111,000.*



## NEW JERSEY-ATLANTIC COASTAL AREA

*The project for hurricane-flood protection and beach erosion control on Raritan Bay and Sandy Hook Bay, New Jersey, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 464, Eighty-seventh Congress, at an estimated cost of \$3,097,000.*

## SUSQUEHANNA RIVER BASIN

*The project for construction of the Fall Brook and Ayleworth Creek Reservoirs, and local flood protection works on the Lackawanna River at Scranton, Pennsylvania, is hereby authorized substantially as recommended by the Chief of Engineers, in Senate Document Numbered 141, Eighty-seventh Congress, at an estimated cost of \$3,596,000.*

*The project for the Juniata River and tributaries, Pennsylvania, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 565, Eighty-seventh Congress, at an estimated cost of \$32,150,000: Provided, That installation of the power generating facilities shall not be made until the Chief of Engineers shall submit a reexamination report to the Congress for authorization.*

## DELAWARE RIVER BASIN

*The project for the comprehensive development of the Delaware River Basin, New York, New Jersey, Pennsylvania, and Delaware, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers, in House Document Numbered 522, Eighty-seventh Congress, at an estimated cost of \$192,400,000.*

## POTOMAC RIVER BASIN

*The project for the North Branch of the Potomac River, Maryland and West Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers, in House Document Numbered 469, Eighty-seventh Congress, at an estimated cost of \$50,965,000.*

## MIDDLE ATLANTIC COASTAL AREA

*The project for hurricane-flood protection at Norfolk, Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 354, Eighty-seventh Congress, at an estimated cost of \$1,537,000.*

*The project for hurricane-flood protection and beach erosion control at Wrightsville Beach, North Carolina, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 511, Eighty-seventh Congress, at an estimated cost of \$345,600.*

*The project for hurricane-flood protection and beach erosion control at Carolina Beach and vicinity, North Carolina, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 418, Eighty-seventh Congress, at an estimated cost of \$739,000.*

## APALACHICOLA RIVER BASIN, GEORGIA

*The project for the West Point Reservoir, Chattahoochee River, Georgia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 570, Eighty-seventh Congress, at an estimated cost of \$52,900,000.*

## CENTRAL AND SOUTHERN FLORIDA

*The comprehensive plan for flood control and other purposes in central and southern Florida approved in the Act of June 30, 1948, and subsequent Acts of Congress, is hereby modified to include the following items:*

*The project for flood protection of West Palm Beach Canal is hereby authorized substantially as recommended by the Secretary of the Army and the Chief of Engineers in Senate Document Numbered 146, Eighty-seventh Congress, at an estimated cost of \$3,220,000.*

*The project for flood protection on Boggy Creek, Florida, is hereby authorized substantially as recommended by the Chief of Engineers in Senate Document Numbered 125, Eighty-seventh Congress, at an estimated cost of \$1,176,000.*

*The project for South Dade County, Florida, is hereby authorized substantially in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers in Senate Document Numbered 138, Eighty-seventh Congress, at an estimated cost of \$13,388,000.*

*The project for Shingle Creek, Florida, between Clear Lake and Lake Tohopekaliga, for flood control and major drainage is hereby authorized substantially as recommended by the Chief of Engineers in Senate Document Numbered 139, Eighty-seventh Congress, at an estimated cost of \$3,250,000: Provided, That no obligation shall be incurred for development of the Reedy Creek Swamp as a wildlife management area unless the State or one or more other non-Federal entities shall have entered into an agreement in advance to assume at least 50 per centum of the cost associated with that feature of the project.*

*The project for flood protection in the Cutler drain area, Florida, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 123, Eighty-seventh Congress, at an estimated cost of \$2,063,000: Provided, That local interests shall receive credit in the Contributed Fund Account of the project for moneys shown to have been spent after March 1, 1960, for construction of units of the authorized plan for Cutler Drain: Provided further, That such completed work must be inspected and accepted by the Chief of Engineers as constituting useful parts of the authorized plan: And provided further, That the credit established shall be in accordance with cost sharing arrangements for the central and southern Florida flood control project in an amount not to exceed \$124,000.*

## GREEN SWAMP REGION, FLORIDA

*The project for the Four River Basins, Florida, namely the Hillsborough, Oklawaha, Withlacoochee, and Peace Rivers, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 585, Eighty-seventh Congress, at an estimated cost of \$57,760,000: Provided, That the cost sharing shall be as recommended by the Secretary of the Army in House Document Numbered 585, Eighty-seventh Congress: And provided further, That*



planning and construction on the Lowery-Mattie Conservation Area and its appurtenant works is deferred until additional studies are made thereon, and a further report submitted to the Congress.

#### PASCAGOULA RIVER BASIN

The project for flood protection on the Chunky Creek, Chickasawhay and Pascagoula Rivers, Mississippi, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 549, Eighty-seventh Congress, at an estimated cost of \$6,740,000.

#### LOWER MISSISSIPPI RIVER BASIN

The project for flood control and improvement of the lower Mississippi River adopted by the Act approved May 15, 1928, as amended by subsequent Acts, is hereby modified and expanded to include the following item:

(a) Monetary authorizations heretofore and hereafter made available to the project or any portion thereof shall be combined into a single sum and be available for application to any portion of the project.

The project for flood control and improvement of the lower Mississippi River, adopted by the Act of May 15, 1928, as amended, is hereby modified and expanded to include construction of certain improvements in Gin and Muddy Bayous, Yazoo River Basin, Mississippi, substantially in accordance with plans on file in the Office, Chief of Engineers, subject to the approval of such plans by the Secretary of the Army and the President, at an estimated cost of \$150,000.

The project for hurricane-flood protection on the Mississippi River Delta at and below New Orleans, Louisiana, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 550, Eighty-seventh Congress, at an estimated cost of \$7,502,000.

The project for flood protection on Red River in Natchitoches and Red River Parishes, Louisiana, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 476, Eighty-seventh Congress, at an estimated cost of \$1,293,000.

The lower auxiliary channel, Yazoo River Basin, Mississippi, a unit in the Mississippi River and tributaries project, shall hereafter be known and designated as the Will M. Whittington Auxiliary Channel in honor of the late Member of the House of Representatives from the Third District of Mississippi, and former chairman of the House Public Works Committee. The Secretary of the Army, acting through the Chief of Engineers, United States Army, is hereby authorized and directed to erect appropriate markers along the auxiliary channel designating the project "The Will M. Whittington Auxiliary Channel". Any law, regulation, document, or record of the United States in which such project is designated or referred to under the name of lower auxiliary channel, Yazoo River Basin, Mississippi, shall be held and considered to refer to such project by the name of "Will M. Whittington Auxiliary Channel".

## BUFFALO BAYOU

*The project for flood protection on Vince and Little Vince Bayous, Texas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 441, Eighty-seventh Congress, at an estimated cost of \$2,224,000.*

## GULF OF MEXICO

*The project for hurricane-flood protection at Port Arthur and vicinity, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 505, Eighty-seventh Congress, at an estimated cost of \$23,380,000.*

*The project for hurricane-flood protection at Freeport and vicinity, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 495, Eighty-seventh Congress, at an estimated cost of \$3,780,000.*

## TRINITY RIVER BASIN

*The project for flood protection on the East Fork of the Trinity River, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 554, Eighty-seventh Congress, at an estimated cost of \$23,760,000.*

*The project for extension of the Fort Worth Floodway, Texas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 454, Eighty-seventh Congress, at an estimated cost of \$5,148,000.*

## BRAZOS RIVER BASIN

*The project for the San Gabriel River, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 591, Eighty-seventh Congress, at an estimated cost of \$20,250,000.*

*The project for flood protection on the Clear Fork of the Brazos River at and in the vicinity of Abilene, Texas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 506, Eighty-seventh Congress, at an estimated cost of \$31,200,000.*

## TULAROSA BASIN

*The project for flood protection at Alamogordo, New Mexico, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 473, Eighty-seventh Congress, at an estimated cost of \$2,040,000.*

## RIO GRANDE BASIN

*The project for flood protection at Las Cruces, New Mexico, is hereby authorized substantially as recommended by the Chief of Engineers in Senate Document Numbered 117, Eighty-seventh Congress, at an estimated cost of \$3,350,000.*



## ARKANSAS RIVER BASIN

*The Dardanelle lock and dam, Arkansas River, Arkansas, is hereby modified to provide for construction of a sewage outfall system for the city of Russellville, Arkansas, substantially in accordance with plans of said city, approved by the Chief of Engineers, at an estimated cost of \$1,400,000.*

*The Secretary of the Army is hereby authorized and directed to cause an immediate study to be made under the direction of the Chief of Engineers of bank erosion on the Arkansas River between about river mile 455, near Muskogee, Oklahoma, and about river mile 495, near Coweta, Oklahoma. Such project or projects, because of its or their emergency nature, are hereby authorized as determined to be feasible and justified by the Chief of Engineers and Secretary of the Army with the approval of the President unless within the first period of sixty calendar days of continuous session of the Congress after the date on which the report is submitted to it such report is disapproved by the Congress: Provided, That the requirements for cooperation shall include provisions that local interests shall furnish all lands, easements, and rights-of-way; hold and save the United States free from damages; maintain and operate after completion; and make a cash contribution in recognition of any special benefits: And provided further, That with respect to any work found justified in the vicinity of Wybark, Oklahoma, local interests shall meet the requirements as stated and shall make a cash contribution of not less than \$150,000 which shall include the value of all lands, easements, and rights-of-way required to be furnished, and the value of goods and services provided for purposes of project installation on a basis acceptable to the Chief of Engineers: Provided, That the cost to the Federal Government shall not exceed \$2,000,000.*

*The project for improvement of the Verdigris River and tributaries, Oklahoma and Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 563, Eighty-seventh Congress, at an estimated cost of \$62,400,000.*

*The project for flood protection on Big Hill Creek, Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 577, Eighty-seventh Congress, at an estimated cost of \$3,785,000.*

*The project for the Kaw Reservoir, Arkansas River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 143, Eighty-seventh Congress, at an estimated cost of \$83,230,000: Provided, That nothing in this Act shall be construed as authorizing the acquisition of additional lands for establishment of a national wildlife refuge at the reservoir.*

*The project for flood protection on Cow Creek, Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 531, Eighty-seventh Congress, at an estimated cost of \$1,560,000.*

*The project for flood protection on the Arkansas River at Dodge City, Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 498, Eighty-seventh Congress, at an estimated cost of \$2,133,000.*

## WHITE RIVER BASIN

*The flood protection project for Village Creek, Jackson and Lawrence Counties, Arkansas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 352, Eighty-seventh Congress, at an estimated cost of \$1,968,000.*

*The project for flood protection on Village Creek, White River, and Mayberry Levee Districts, Arkansas, is hereby modified to provide for construction of a pumping plant, substantially as recommended by the Chief of Engineers in House Document Numbered 577, Eighty-seventh Congress, at an estimated additional cost of \$1,018,000.*

## RED RIVER BASIN

*That the general plan for flood control and other purposes on Red River below Denison Dam is hereby modified to authorize the Chief of Engineers to adjust the local cooperation requirements of the McKinney Bayou, Arkansas and Texas, Maniece Bayou, Arkansas, and East Point, Louisiana, projects so as to bring such requirements in accord with the recommendations of the Secretary of the Army and approval of the President, such adjustment to be made at the earliest practicable date.*

*The project for Sanders, Big Pine, and Collier Creeks, Texas, is hereby authorized substantially as recommended by the Chief of Engineers, at an estimated cost of \$16,100,000, subject to the recommendations of the Secretary of the Army and approval of the President.*

*The project for Lake Kemp, Wichita River, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 144, Eighty-seventh Congress, at an estimated cost of \$6,410,000.*

*The modification of the Broken Bow Reservoir, Mountain Fork River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 137, Eighty-seventh Congress, at an estimated cost of \$23,800,000.*

*The project for the Clayton and Tuskahoma Reservoirs, Kiamichi River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 145, Eighty-seventh Congress, at an estimated cost of \$29,748,000.*

*The project providing for the construction of two experimental water quality study projects in the Arkansas-Red River Basins, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 105, Eighty-seventh Congress, at an estimated cost of \$300,000.*

## MISSOURI RIVER BASIN

*(a) The Kaysinger Bluff Reservoir, Osage River, Missouri, is hereby modified substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 578, Eighty-seventh Congress, at an estimated additional cost of \$43,245,000: Provided, That nothing in this Act shall be construed as authorizing the acquisition of additional lands for the establishment of a national wildlife refuge at the reservoir.*

*(b) The project for the Kansas River, Kansas, Nebraska, and Colorado, is hereby authorized substantially in accordance with the recom-*



recommendations of the Secretary of the Army and the Chief of Engineers in Senate Document Numbered 122, Eighty-seventh Congress, at an estimated cost of \$88,070,000: Provided, That the authorization for the Woodbine Reservoir on Lyons Creek is deferred at this time, subject to submission of a new feasibility report to the Eighty-eighth Congress, which shall take into account the water and related land resource development plans of the Soil Conservation Service, the Kansas Water Resources Board, and Lyons Creek Watershed Joint District Numbered 41, and preparation of said report is hereby authorized.

The project for flood protection on White Clay Creek at Atchison, Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 151, Eighty-seventh Congress, at an estimated cost of \$3,495,000.

The project for flood protection on Papillion Creek and tributaries, Nebraska, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 475, Eighty-seventh Congress, at an estimated cost of \$2,122,000.

The project for flood protection on Indian Creek, Iowa, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 438, Eighty-seventh Congress, at an estimated cost of \$1,270,000.

The project for Grand River and tributaries, North and South Dakota, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 574, Eighty-seventh Congress, at an estimated cost of \$2,670,000: Provided, That the project shall be constructed, operated, and maintained by the Chief of Engineers under the direction of the Secretary of the Army.

The requirements of local cooperation on the project for flood control on the Floyd River, Iowa, authorized by Public Law 85-500, as recommended by the Chief of Engineers in House Document Numbered 417, Eighty-fourth Congress, is hereby modified to read as follows: "Provided, That responsible local interests give assurances satisfactory to the Secretary of the Army that they will (a) furnish without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project; (b) hold and save the United States free from damages due to the construction works; (c) make without cost to the United States all necessary road, highway, highway bridges other than those required to carry Interstate Highway 29 over the relocated Floyd River, and utility alterations and additions; (d) contribute in cash 0.84 per centum of the estimated first cost of the work for which the United States would be responsible, a contribution presently estimated at \$65,000; (e) upon authorization of the project, to take all possible action under Iowa law, short of actual purchase, to prevent additional developments within the right-of-way that might increase the overall cost of the project; and (f) maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army."

#### OHIO RIVER BASIN

The project for flood protection on the Kokosing River, Ohio, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 220, Eighty-seventh Congress, at an estimated cost of \$2,438,000.

*The project for flood protection on the Wabash River at and in the vicinity of Mount Carmel, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 573, Eighty-seventh Congress, at an estimated cost of \$1,417,000.*

*The project for flood protection on the Mad River above Huffman Dam, Ohio, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 439, Eighty-seventh Congress, at an estimated cost of \$7,930,000.*

*The project for the Kentucky River, Kentucky, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 423, Eighty-seventh Congress, at an estimated cost of \$26,020,000.*

*The project for Twelvepole Creek, West Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 520, Eighty-seventh Congress, at an estimated cost of \$11,000,000.*

*The project for the Guyandot River and tributaries, West Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 569, Eighty-seventh Congress, second session, at an estimated cost of \$60,477,000.*

*The project for flood protection on the Buckhannon River, West Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 43, Eighty-seventh Congress, at an estimated cost of \$1,206,000.*

*The project for flood protection on Crab Creek at Youngstown, Ohio, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 440, Eighty-seventh Congress, at an estimated cost of \$2,268,000.*

*The project for the Scioto River, Ohio, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 587, Eighty-seventh Congress, at an estimated cost of \$55,307,000: Provided, That nothing in this Act shall be construed as authorizing the acquisition of additional lands for the establishment of a wildlife refuge in this project.*

*The project for flood protection on the Allegheny River at Salamanca, New York, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 166, Eighty-seventh Congress, at an estimated cost of \$1,390,000.*

*The project for French Creek, Pennsylvania, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 95, Eighty-seventh Congress, at an estimated cost of \$23,102,000.*

*The project for the Saline River and tributaries, Illinois, authorized by the Flood Control Act of 1958 (Public Law 85-500) is hereby modified to authorize the Chief of Engineers to adjust the cash contribution required of local interests to such amount as is recommended by the Secretary of the Army and approved by the President, such adjustment to be made at the earliest practicable date.*

#### UPPER MISSISSIPPI RIVER BASIN

*The project for the Illinois River and tributaries, Illinois, Wisconsin, and Indiana, is hereby authorized substantially as recommended by the*



*Chief of Engineers in House Document Numbered 472, Eighty-seventh Congress, at an estimated cost of \$71,465,000.*

*The project for Rend Lake, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 541, Eighty-seventh Congress, at an estimated cost of \$35,500,000.*

*The project for flood protection on the Mississippi River at and in the vicinity of Guttenberg, Iowa, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 286, Eighty-seventh Congress, at an estimated cost of \$729,000.*

*The project for flood protection on the Mississippi River between Sainte Genevieve and Saint Marys, Missouri, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 519, Eighty-seventh Congress, at an estimated cost of \$2,500,000.*

*The project for the Harrisonville and Ivy Landing Drainage and Levee District Numbered 2, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 542, Eighty-seventh Congress, at an estimated cost of \$1,112,000.*

*The project for the Columbia Drainage and Levee District Numbered 3, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 543, Eighty-seventh Congress, at an estimated cost of \$986,000.*

*The project for the Prairie DuPont Levee and Sanitary District, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 540, Eighty-seventh Congress, at an estimated cost of \$921,000.*

*The project for flood protection on Richland Creek, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 571, Eighty-seventh Congress, at an estimated cost of \$4,995,000.*

*The project for the Joanna Reservoir, Salt River, Missouri, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 507, Eighty-seventh Congress, at an estimated cost of \$63,300,000.*

*The project for flood protection on the Pecatonica River, Illinois and Wisconsin, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 539, Eighty-seventh Congress, at an estimated cost of \$850,000.*

*The project for flood protection on Rock River at Rockford, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 142, Eighty-seventh Congress, at an estimated cost of \$7,228,000.*

*The project for the Mississippi River urban areas from Hampton, Illinois, to mile 300, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 564, Eighty-seventh Congress, at an estimated cost of \$9,289,000.*

*The project for the Mississippi River urban areas from Hampton, Illinois, to Cassville, Wisconsin, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 450, Eighty-seventh Congress, at an estimated cost of \$5,350,000.*

*The project for the Kickapoo River, Wisconsin, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 557, Eighty-seventh Congress, at an estimated cost of \$15,570,000.*

*The project for flood protection on the Warroad River and Bull Dog Creek, Minnesota, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 449, Eighty-seventh Congress, at an estimated cost of \$972,000.*

#### GREAT LAKES BASIN

*The project for flood protection on the River Rouge, Michigan, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 148, Eighty-seventh Congress, at an estimated cost of \$8,659,000.*

*The project for flood protection on the Sandusky River, Ohio, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 136, Eighty-seventh Congress, at an estimated cost of \$4,300,000.*

#### GILA RIVER BASIN

*The project for the Camelsback Reservoir, Gila River, Arizona, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 127, Eighty-seventh Congress, at an estimated cost of \$9,770,000.*

*The project for flood protection on the Gila River below Painted Rock Reservoir, Arizona, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 116, Eighty-seventh Congress, at an estimated cost of \$18,255,000.*

*The project for flood protection on Pinal Creek, Arizona, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 512, Eighty-seventh Congress, at an estimated cost of \$1,300,000.*

#### TRUCKEE RIVER BASIN

*The project for flood protection on the Truckee River and tributaries, California and Nevada, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 435, Eighty-seventh Congress, at an estimated cost of \$2,385,000.*

#### SAN FRANCISCO BAY AREA

*The project for flood protection on Alameda Creek, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 128, Eighty-seventh Congress, at an estimated cost of \$14,680,000.*

*The project for Corte Madera Creek, Marin County, California, is hereby authorized substantially in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers in House Document Numbered 545, Eighty-seventh Congress, at an estimated cost of \$5,534,000: Provided, That local interests shall contribute in cash 3 per centum of the Federal construction of the Rose Valley unit with a contribution presently estimated at \$158,000.*



## SAN JOAQUIN RIVER BASIN

*The New Melones project, Stanislaus River, California, authorized by the Flood Control Act approved December 22, 1944 (58 Stat. 887), is hereby modified substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 453, Eighty-seventh Congress, at an estimated cost of \$113,717,000: Provided, That upon completion of construction of the dam and powerplant by the Corps of Engineers, the project shall become an integral part of the Central Valley project and be operated and maintained by the Secretary of the Interior pursuant to the Federal reclamation laws, except that the flood control operation of the project shall be in accordance with the rules and regulations prescribed by the Secretary of the Army: Provided further, That the Stanislaus River Channel, from Goodwin Dam to the San Joaquin River, shall be maintained by the Secretary of the Army to a capacity of at least eight thousand cubic feet per second subject to the condition that responsible local interests agree to maintain private levees and to prevent encroachment on the existing channel and floodway between the levees: Provided further, That before initiating any diversions of water from the Stanislaus River Basin in connection with the operation of the Central Valley project, the Secretary of the Interior shall determine the quantity of water required to satisfy all existing and anticipated future needs within that basin and the diversions shall at all times be subordinate to the quantities so determined: Provided further, That the Secretary of the Army adopt appropriate measures to insure the preservation and propagation of fish and wildlife in the New Melones project and shall allocate to the preservation and propagation of fish and wildlife, as provided in the Act of August 14, 1946 (60 Stat. 1080), an appropriate share of the cost of constructing the Stanislaus River division and of operating and maintaining the same: Provided further, That the Secretary of the Army, in connection with the New Melones project, construct basic public recreation facilities, acquire land necessary for that purpose, the cost of constructing such facilities and acquiring such lands to be nonreimbursable and nonreturnable: Provided further, That contracts for the sale and delivery of the additional electric energy available from the Central Valley project power system as a result of the construction of the plants herein authorized and their integration with that system shall be made in accordance with preferences expressed in the Federal reclamation laws except that a first preference, to the extent as needed and as fixed by the Secretary of the Interior, but not to exceed 25 per centum of such additional energy, shall be given, under reclamation law, to preference customers in Tuolumne and Calaveras Counties, California, for use in that county, who are ready, able, and willing, within twelve months after notice of availability by the Secretary of the Interior, to enter into contracts for the energy and that Tuolumne and Calaveras County preference customers may exercise their option in the same date in each successive fifth year providing written notice of their intention to use the energy is given to the Secretary not less than eighteen months prior to said dates: And provided further, That the Secretary of the Army give consideration during the preconstruction planning for the New Melones project to the advisability of including storage for the regulation of stream-flow for the purpose of downstream water quality control.*

*The Hidden Reservoir, Fresno River, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 37, Eighty-seventh Congress, at an estimated cost of \$14,338,000.*

*The Buchanan Reservoir, Chowchilla River, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 98, Eighty-seventh Congress, at an estimated cost of \$13,585,000.*

*The project for flood protection on Mormon Slough, Calaveras River, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 576, Eighty-seventh Congress, at an estimated cost of \$1,960,000.*

#### RUSSIAN RIVER BASIN

*The project for Russian River, Dry Creek, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 547, Eighty-seventh Congress, at an estimated cost of \$42,400,000.*

#### REDWOOD CREEK BASIN

*The project for flood protection on Redwood Creek, Humboldt County, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 497, Eighty-seventh Congress, at an estimated cost of \$2,580,000.*

#### LOS ANGELES RIVER BASIN

*In addition to previous authorizations, there is hereby authorized to be appropriated the sum of \$3,700,000 for the prosecution of the comprehensive plan for the Los Angeles River Basin approved in the Act of August 18, 1941, as amended and supplemented by subsequent Acts of Congress.*

#### ROGUE RIVER BASIN

*The project for the Rogue River, Oregon and California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 566, Eighty-seventh Congress, at an estimated cost of \$106,700,000, subject to the conditions of local cooperation specified in said report: Provided, That the project is to be located, constructed, and operated to accomplish the benefits as set forth and described in the report and appendixes: And provided further, That in the years of short water supply all water users will share the available water in the same proportions that they would share the total full supply when it is available, and that no further water-use allocations will be made from the authorized storage so as to retain the maximum possible benefits to authorized uses during the periods of adversity when storage shortages occur.*

#### COLUMBIA RIVER BASIN

*The projects and plans for the Columbia River Basin, including the Willamette River Basin, authorized by the Flood Control Act of June 28, 1938, and subsequent Acts of Congress, including Flood Control Acts of May 17, 1950, September 3, 1954, July 3, 1958, and July 14, 1960, are hereby modified to include the projects listed below for flood control and other purposes in the Columbia River Basin (including the Willamette River Basin) substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 403, Eighty-seventh*



*Congress: Provided, That the depth and width of the authorized channel in the Columbia-Snake River barge navigation project shall be established as fourteen feet and two hundred and fifty feet, respectively, at minimum regulated flow.*

*Asotin Dam, Snake River, Idaho and Washington;*

*Bruces Eddy Dam and Reservoir, North Fork, Clearwater River, Idaho;*

*Strube Reregulating Dam and Reservoir, South Fork, McKenzie River, Oregon;*

*Gate Creek Dam and Reservoir, Gate Creek, Oregon;*

*Fern Ridge Dam and Reservoir modification, Long Tom River, Oregon;*

*Cascadia Dam and Reservoir, South Santiam River, Oregon.*

*The project for the Ririe Dam and Reservoir, Willow Creek, Idaho, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 562, Eighty-seventh Congress, at an estimated cost of \$7,027,000.*

*The project for the Blackfoot Dam and Reservoir, Blackfoot River, Idaho, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 568, Eighty-seventh Congress, at an estimated cost of \$829,000.*

#### WYNOOCHEE RIVER

*The project for the Wynoochee River, Washington, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 601, Eighty-seventh Congress, at an estimated cost of \$40,211,000: Provided, That the installation of the power-generating facilities shall not be made until the Chief of Engineers shall submit a reexamination report to the Congress for authorization.*

#### COOK INLET, ALASKA

*The project for Bradley Lake, Cook Inlet, Alaska, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 455, Eighty-seventh Congress, at an estimated cost of \$45,750,000.*

*SEC. 204. (a) For the purpose of developing hydroelectric power and to encourage and promote the economic development of and to foster the establishment of essential industries in the State of Alaska, and for other purposes, the Secretary of the Army, acting through the Chief of Engineers, is authorized to construct and the Secretary of the Interior is authorized to operate and maintain the Crater-Long Lakes division of the Snettisham project near Juneau, Alaska. The works of the division shall consist of pressure tunnels, surge tanks, penstocks, a powerplant, transmission facilities, and related facilities, all at an estimated cost of \$41,634,000.*

*(b) Electric power and energy generated at the division except that portion required in the operation of the division, shall be disposed of by the Secretary of the Interior in such a manner as to encourage the most widespread use thereof at the lowest possible rates to consumers consistent with sound business principles. Rate schedules shall be drawn having regard to the recovery of the costs of producing and transmitting the power and energy, including the amortization of the capital investment over a reasonable period of years, with interest at the average rate (which rate*

shall be certified by the Secretary of the Treasury) paid by the United States on its marketable long-term securities outstanding on the date of this Act and adjusted to the nearest one-eighth of 1 per centum. In the sale of such power and energy, preference shall be given to Federal agencies, public bodies, and cooperatives. It shall be a condition of every contract made under this Act for the sale of power and energy that the purchaser, if it be a purchaser for resale, will deliver power and energy to Federal agencies or facilities thereof within its transmission area at a reasonable charge for the use of its transmission facilities. All receipts from the transmission and sale of electric power and energy generated at said division shall be covered into the Treasury of the United States to the credit of miscellaneous receipts.

(c) The appropriate Secretary is authorized to perform any and all acts and enter into such agreements as may be appropriate for the purpose of carrying the provisions of this Act into full force and effect, including the acquisition of rights and property, and the Secretary of the Army, when an appropriation shall have been made for the commencement of construction or the Secretary of the Interior in the case of operation and maintenance of said division, may, in connection with the construction or operation and maintenance of such division, enter into contracts for miscellaneous services for materials and supplies, as well as for construction, which may cover such periods of time as the appropriate Secretary may consider necessary but in which the liability of the United States shall be contingent upon appropriations being made therefor.

SEC. 205. Section 205 of the Flood Control Act of 1948, as amended (33 U.S.C. 701s), is amended (a) by striking out "\$10,000,000" and inserting in lieu thereof "\$25,000,000", (b) by striking out the term "small flood control projects" and inserting in lieu thereof the term "small projects for flood control and related purposes", and (c) by striking out "Provided, That not more than \$400,000 shall be allotted for this purpose at any single locality from the appropriations for any one fiscal year" and inserting in lieu thereof "Provided, That not more than \$1,000,000 shall be allotted under this section for a project at any single locality and the amount allotted shall be sufficient to complete Federal participation in the project".

SEC. 206. The first sentence of section 5 of the Flood Control Act approved August 18, 1941, as amended (33 U.S.C. 701n), is hereby further amended to read as follows: "That there is hereby authorized an emergency fund in the amount of \$15,000,000 to be expended in flood emergency preparation, in flood fighting and rescue operations, or in the repair or restoration of any flood control work threatened or destroyed by flood, including the strengthening, raising, extending, or other modification thereof as may be necessary in the discretion of the Chief of Engineers for the adequate functioning of the work for flood control; in the emergency protection of federally authorized hurricane or shore protection being threatened when in the discretion of the Chief of Engineers such protection is warranted to protect against imminent and substantial loss to life and property; in the repair and restoration of any federally authorized hurricane or shore protective structure damaged or destroyed by wind, wave, or water action of other than an ordinary nature when in the discretion of the Chief of Engineers such repair and restoration is warranted for the adequate functioning of the structure for hurricane or shore protection."



*SEC. 207. Section 4 of the Act entitled "An Act authorizing the construction of certain public works on rivers and harbors for flood control, and for other purposes", approved December 22, 1944, as amended by section 4 of the Flood Control Act of July 24, 1946, and by section 209 of the Flood Control Act of 1954, is hereby further amended to read as follows:*

*"SEC. 4. The Chief of Engineers, under the supervision of the Secretary of the Army, is authorized to construct, maintain, and operate public park and recreational facilities at water resource development projects under the control of the Department of the Army, to permit the construction of such facilities by local interests (particularly those to be operated and maintained by such interests), and to permit the maintenance and operation of such facilities by local interests. The Secretary of the Army is also authorized to grant leases of lands, including structures or facilities thereon, at water resource development projects for such periods, and upon such terms and for such purposes as he may deem reasonable in the public interest: Provided, That leases to nonprofit organizations for park or recreational purposes may be granted at reduced or nominal considerations in recognition of the public service to be rendered in utilizing the leased premises: Provided further, That preference shall be given to Federal, State, or local governmental agencies, and licenses or leases where appropriate, may be granted without monetary considerations, to such agencies for the use of all or any portion of a project area for any public purpose, when the Secretary of the Army determines such action to be in the public interest, and for such periods of time and upon such conditions as he may find advisable: And provided further, That in any such lease or license to a Federal, State, or local governmental agency which involves lands to be utilized for the development and conservation of fish and wildlife, forests, and other natural resources, the licensee or lessee may be authorized to cut timber and harvest crops as may be necessary to further such beneficial uses and to collect and utilize the proceeds of any sales of timber and crops in the development, conservation, maintenance, and utilization of such lands. Any balance of proceeds not so utilized shall be paid to the United States at such time or times as the Secretary of the Army may determine appropriate. The water areas of all such projects shall be open to public use generally, without charge, for boating, swimming, bathing, fishing, and other recreational purposes, and ready access to and exit from such areas along the shores of such projects shall be maintained for general public use, when such use is determined by the Secretary of the Army not to be contrary to the public interest, all under such rules and regulations as the Secretary of the Army may deem necessary. No use of any area to which this section applies shall be permitted which is inconsistent with the laws for the protection of fish and game of the State in which such area is situated. All moneys received by the United States for leases or privileges shall be deposited in the Treasury of the United States as miscellaneous receipts."*

*SEC. 208. Section 207 of the Flood Control Act of 1960 (74 Stat. 501) is hereby amended to read as follows:*

*"SEC. 207. (a) When used in this section—*

*"(1) The term 'Agency' means the Corps of Engineers, United States Army or the Bureau of Reclamation, United States Department of the Interior, whichever has jurisdiction over the project concerned.*

"(2) The term 'head of the Agency concerned' means the Chief of Engineers or the Commissioner, Bureau of Reclamation, or their respective designees.

"(3) The term 'water resources projects to be constructed in the future' includes all projects not yet actually under construction, and, to the extent of work remaining to be completed, includes projects presently under construction where road relocations or identifiable components thereof are not complete as of the date of this section.

"(4) The term 'time of the taking' is the date of the relocation agreement, the date of the filing of a condemnation proceeding, or a date agreed upon between the parties as the date of taking.

"(b) Whenever, in connection with the construction of any authorized flood control, navigation, irrigation, or multiple-purpose project for the development of water resources, the head of the Agency concerned determines it to be in the public interest to utilize existing public roads as a means of providing access to such projects during construction, such Agency may improve, reconstruct, and maintain such roads and may contract with the local authority having jurisdiction over the roads to accomplish the necessary work. The accomplishment of such work of improvement may be carried out with or without obtaining any interest in the land on which the road is located in accordance with mutual agreement between the parties: Provided, (1) That the head of the Agency concerned determines that such work would result in a saving in Federal cost as opposed to the cost of providing a new access road at Federal expense, (2) that, at the completion of construction, the head of the Agency concerned will, if necessary, restore the road to at least as good condition as prior to the beginning of utilization for access during construction, and (3) that, at the completion of construction, the responsibility of the Agency for improvement, reconstruction, and maintenance shall cease.

"(c) For water resources projects to be constructed in the future, when the taking by the Federal Government of an existing public road necessitates replacement, the substitute provided will, as nearly as practicable, serve in the same manner and reasonably as well as the existing road. The head of the Agency concerned is authorized to construct such substitute roads to design standards comparable to those of the State, or, where applicable State standards do not exist, those of the owning political division in which the road is located, for roads of the same classification as the road being replaced. The traffic existing at the time of the taking shall be used in the determination of the classification. In any case where a State or political subdivision thereof requests that such a substitute road be constructed to a higher standard than that provided in the preceding provisions of this subsection, and pays, prior to commencement of such construction, the additional costs involved due to such higher standard, such Agency head is authorized to construct such road to such higher standard. Federal costs under the provisions of this subsection shall be part of the nonreimbursable project costs."

SEC. 209. The Secretary of the Army is hereby authorized and directed to cause surveys for flood control and allied purposes, including channel and major drainage improvements, and floods aggravated by or due to wind or tidal effects, to be made under the direction of the Chief of Engineers, in drainage areas of the United States and its territorial possessions, which include the following named localities: Provided, That after the regular or formal reports made on any survey are submitted to Congress, no supplemental or additional report or estimate shall be made unless author-



ized by law except that the Secretary of the Army may cause a review of any examination or survey to be made and a report thereon submitted to Congress, if such review is required by the national defense or by changed physical or economic conditions: Provided further, That the Government shall not be deemed to have entered upon any project for the improvement of any waterway or harbor mentioned in this title until the project for the proposed work shall have been adopted by law:

*Valenciana River, Puerto Rico.*

*Waccasassa River (Levy County and Gilchrist County), Florida.*

*Lake Pontchartrain, North Shore, Louisiana.*

*Peytons Creek and tributaries, Texas.*

*Clear Creek, Texas.*

*San Bernard River, Texas.*

*Arkansas River Basin, with reference to the effect of the Eufaula and Keystone Reservoirs, Oklahoma, on the water supply facilities of the cities of McAlester and Yale, respectively, with a view to determining the extent, if any, of Federal participation in the replacement of the cities' water supply facilities in equity without regard to limitation contained in existing Corps of Engineers protective and relocation plans.*

*Cumberland River, Kentucky and Tennessee, with reference to the effect of the Barkley Dam project, on the water supply and sewage treatment facilities of the cities of Cadiz, Kuttawa, and Eddyville, Kentucky, and the State penitentiary at Eddyville, Kentucky, respectively, with a view to determining the extent, if any, of Federal participation in the replacement of their water supply and sewage treatment facilities in equity without regard to limitation contained in existing Corps of Engineers protective and relocation plans.*

*Missouri River Basin, with reference to the effect of Oahe and Garrison Reservoirs, North Dakota and South Dakota, on the sewage treatment facilities of the cities of Bismarck and Mandan, North Dakota, respectively, with a view to determining the extent, if any, of Federal participation in the sewage treatment facilities in equity without regard to limitation contained in existing Corps of Engineers protective and relocation plans.*

*All streams in Santa Barbara County, California, draining the Santa Ynez Mountains, except Santa Ynez River and tributaries.*

*Sacramento River Basin and streams in northern California draining into the Pacific Ocean for the purposes of developing, where feasible, multiple-purpose water resource projects, particularly those which would be eligible under the provisions of title III of Public Law 85-500.*

*Battle Creek, Sacramento River, California.*

*Kaskaskia River levees, Illinois; review of requirements of local cooperation.*

*Puget Sound, Washington, and adjacent waters, including tributaries, in the interest of flood control, navigation, and other water uses and related land resources.*

*Harbors and rivers in Hawaii, with a view to determining the advisability of improvements in the interest of navigation, flood control, hydroelectric power development, water supply, and other beneficial water uses, and related land resources.*

*Waimea River, Kokee Area, Kauai, Hawaii, for multiple purposes.*

*Waipio River, Kohala-Hamakua coast, Island of Hawaii, for multiple purpose development.*

*Iao River, Wailuku, Maui, Hawaii.*

*SEC. 210. The Secretary of the Army acting through the Corps of Engineers is hereby authorized to replace with adequate floodway capacity the bridge over Boeuf River, Chicot County, Arkansas, approximately three miles north of the county line, and the bridge over Big Bayou, Chicot County, Arkansas, approximately two miles upstream from its confluence with the Boeuf River which were altered as part of the project for Boeuf and Tensas Rivers and Bayou Macon, authorized by the Flood Control Act of December 22, 1944, and which were recently destroyed by floods, at an estimated cost of \$115,000.*

*SEC. 211. The Wilkesboro Reservoir flood control project, Yadkin River, North Carolina, authorized by the Flood Control Act of 1946, shall hereafter be known and designated as the W. Kerr Scott Dam and Reservoir, in honor of the late Senator W. Kerr Scott of North Carolina. Any law, regulation, document, or record of the United States in which such project is designated or referred to shall be held and considered to refer to such project by the name of the W. Kerr Scott Dam and Reservoir.*

*SEC. 212. Title II of this Act may be cited as the "Flood Control Act of 1962".*

And the Senate agree to same.

CLIFFORD DAVIS,  
JOHN A. BLATNIK,  
ROBERT E. JONES,  
WILLIAM C. CRAMER,  
JOHN F. BALDWIN, Jr.,

*Managers on the Part of the House.*

ROBERT S. KERR,  
PAT McNAMARA,  
JENNINGS RANDOLPH,  
JOHN SHERMAN COOPER,  
HIRAM L. FONG,

*Managers on the Part of the Senate.*



## STATEMENT OF THE MANAGERS ON THE PART OF THE HOUSE

The managers on the part of the House at the conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H.R. 13273) authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes, submit the following statement in explanation of the effect of the action agreed upon by the conferees and recommended in the accompanying conference report:

The Senate amendment strikes out all of the House bill after the enacting clause and inserts a substitute. The House recedes from its disagreement to the amendment of the Senate, with an amendment which is a substitute for both the House bill and the Senate amendment. The differences between the Senate amendment and the substitute agreed to in conference are noted in the following outline, except for incidental changes made necessary by reason of agreements reached by the conferees and minor and clarifying changes.

### TITLE I—RIVERS AND HARBORS

The Senate amendment did not delete any of the projects for navigation contained in the House bill. The Senate amendment did modify certain of these projects and it also authorized projects not contained in the House bill.

(1) The Senate amendment authorized further partial accomplishment of the project for the Great Lakes to Hudson River Waterway, N.Y., at an estimated cost of \$1,000,000 additional.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

(2) The project for Newark Bay, Hackensack and Passaic Rivers, N.J., contained in the House bill was modified by the Senate amendment to require approval of the plans of the Chief of Engineers by both the Secretary of the Army and the President.

The proposed conference substitute is the same as the Senate amendment.

(3) The Senate amendment authorized the project for the James River, Va., at an estimated cost of \$39,000,000, with the condition that the authorization expire after 5 years unless the Governor of Virginia has endorsed the project within that time and a further requirement that there be submitted to Congress a feasible report which takes account of possible adverse effects of the project on seed oyster production.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

(4) The Senate amendment authorized the project for Canaveral Harbor, Fla., at an estimated cost of \$5,076,000.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

(5) The project for Holt lock and dam, Alabama, as authorized in the House bill, required a report of the Chief of Engineers to be submitted to Congress within the first period of 60 calendar days of continuous session of the 88th Congress. The Senate amendment extended this period to 90 days.

The proposed conference substitute is the same as the House bill.

(6) The Senate amendment authorized the modification of the Mississippi River, Baton Rouge to Gulf of Mexico Barge Channel through Devils Swamp, La., for dikes and retaining structures, at a Federal cost of \$299,500, with local interests to contribute \$100,500.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

(7) The Senate amendment authorized the project for Bayous Terrebonne, Petit Caillou, Grand Caillou, Du Large, and connecting channels, Louisiana, and Atchafalaya River, Morgan City to Gulf of Mexico, at an estimated cost of \$45,000.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

(8) The project for the Gulf Intracoastal Waterway, La. and Tex., contained in the House bill was modified by the Senate amendment to provide that the authority to make such modifications as the Chief of Engineers deems desirable, as set forth in House Document No. 556, 87th Congress, shall be construed to apply to, but not be limited to, the improvement of the existing channels at proposed channel relocation sites in lieu of such relocations.

The proposed conference substitute is the same as the Senate amendment.

(9) The project for the Calcasieu River salt water barrier, Louisiana, contained in the House bill was modified by the Senate amendment through the inclusion of a proviso requiring a study by the Corps of Engineers of the question of cost sharing and authorizing such cost sharing as is determined feasible and justified by the Chief of Engineers and the Secretary of the Army within the first period of 60 calendar days of Congress after the date on which the report on cost sharing is submitted to the Congress, unless Congress disapproves such report.

The proposed conference substitute is the same as the Senate amendment.

(10) The project for Trinity River, Wallisville Reservoir, Tex., as contained in the House bill was modified by the Senate amendment through the addition of a proviso that nothing in the act shall be construed as authorization for the acquisition of additional lands for the establishment of a national wildlife refuge at the Reservoir.

The proposed conference substitute is the same as the Senate amendment.

(11) The project for the Illinois Waterway, Ill. and Ind., was authorized in the House bill at an estimated cost of \$114,652,000. The



Senate amendment reduced that figure to \$40,000,000 for initiation and partial accomplishment of the project.

The proposed conference substitute is the same as the Senate amendment.

(12) The Senate amendment modified the project for Hilo Harbor, Hawaii, to provide for adjustment of the cash contribution required of local interests in accordance with the recommendations by the Secretary of the Army and approved by the President.

The House bill did not contain this provision.

The proposed conference substitute is the same as the Senate amendment, except that the adjustment is required to be made at the earliest practicable date.

#### BEACH EROSION

The Senate amendment did not delete any of the beach erosion projects which were contained in the House bill.

The Senate amendment did modify certain of these projects and it also authorized projects not contained in the House bill.

(1) The project for Fire Island Inlet to Jones Inlet, Long Island, N.Y., contained in the House bill was modified by the Senate amendment by requiring that the plans being prepared by the Chief of Engineers be approved by the Secretary of the Army and the President.

The proposed conference substitute is the same as the Senate amendment.

(2) The Senate amendment authorized a project for Clark Point, New Bedford, Mass., at an estimated cost of \$60,000.

This project is not in the House bill.

The proposed conference substitute is the same as the Senate amendment.

(3) The Senate amendment authorized a project for Palm Beach County from Martin County line to Lake Worth Inlet and from South Lake Worth Inlet to Broward County line, Fla., at an estimated cost of \$128,800.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

(4) The Senate amendment authorized a project for San Juan and vicinity, Puerto Rico, at an estimated cost of \$65,400.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

(5) The Senate amendment authorized a project for Orange County, Calif., at an estimated cost of \$2,845,000.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

#### SHORE PROTECTION MODIFICATIONS

Section 103 of the Senate amendment amended the act of August 13, 1946, which relates to Federal participation in the cost of protecting the shores of publicly owned property by increasing the Federal contribution from one-third to one-half, by requiring that when the property is Federal property all of the cost will be borne by the Federal Government and by requiring that up to 70 percent of the cost

exclusive of land costs shall be borne by the Federal Government when it is a project for restoration of State, county, and other publicly owned shore parks and other conservation areas under certain circumstances. It further authorizes the Secretary of the Army to reimburse local interests for work done by them on authorized projects which individually do not exceed \$1,000,000 in total cost after initiation of the survey studies which form the basis for the project, if the work is approved by the Chief of Engineers as being in accordance with the project; however, the reimbursement shall be subject to appropriations applicable thereto or funds available therefor and shall not take precedence over other pending projects of higher priority. It further authorizes the Chief of Engineers to undertake small shore and beach restoration and protection projects not specifically authorized by Congress if he finds it advisable and permits him to spend not to exceed \$3,000,000 in any one fiscal year for such projects, except that not more than \$400,000 shall be allocated to any one project and the total amount allotted shall be enough to complete Federal participation in the project. Local cooperation is required and the work on the small project must be complete in itself and not commit the United States to any additional improvement to insure its successful operation.

Subsection (b) of section 103 of the Senate amendment provides that all existing law relating to surveys of rivers and harbors shall apply to surveys related to shore protection.

Subsection (c) of section 103 of the Senate amendment provides that the cost sharing provisions of this act shall apply to authorized projects not substantially completed before the date of enactment of this act and directs the Chief of Engineers to recompute Federal contributions to such projects accordingly.

The bill as passed by the House contained no comparable provision.

The proposed conference substitute is the same as the Senate amendment.

#### AQUATIC PLANT CONTROL

Section 104 of the Senate amendment modifies the project for aquatic plant control authorized by the River and Harbor Act of 1958 to make research costs and planning costs prior to construction entirely borne by the United States.

The House bill contained no such provision.

The proposed conference substitute is the same as the Senate amendment.

#### ILLINOIS AND MISSISSIPPI CANAL

Section 106 of the Senate amendment amends section 110(f) of the River and Harbor Act of 1958 to authorize the appropriation of an additional sum of \$800,000 to be expended by the Chief of Engineers or by the State of Illinois for the repair and modification of the Illinois and Mississippi Canal, notwithstanding subsection (b) of such section 110, upon transfer to the State of Illinois of all the right, title, and interest of the United States in and to the canal in accordance with an agreement of December 14, 1960.

The House bill contained no such provision.

The proposed conference substitute is the same as the Senate amendment.



## COMPILATION

Section 107 of the Senate amendment directed the Secretary of the Army to prepare and transmit to Congress as soon as practicable a compilation of survey and review reports on river and harbor and flood control improvements similar to compilations which have been prepared in the past.

The House bill did not contain this requirement.

The proposed conference substitute is the same as the Senate amendment.

## SURVEYS

In addition to the surveys authorized in the House bill the Senate amendment authorized the following surveys to be made: Falmouth Harbor, Maine, Little Egg Inlet, N.J., Brigantine Inlet, N.J., and Corsons Inlet, N.J.

The proposed conference substitute is the same as the Senate amendment.

The Senate amendment provided general authorization for surveys of the coastal areas of the United States and its possessions including the shores of the Great Lakes in the interest of beach erosion, hurricane protection, and related purposes with a requirement that surveys of particular areas shall be authorized by resolutions of either the Committee on Public Works of the Senate or of the House.

The House bill contained no such general authorization.

The proposed conference substitute is the same as the Senate amendment.

## TITLE II—FLOOD CONTROL

The Senate amendment contained all of the projects for flood control contained in the House bill. It modified certain of these projects as passed by the House and added certain others. The following projects were either modified or added by the Senate and are contained in the proposed conference substitute:

## SUSQUEHANNA RIVER BASIN

The Senate amendment authorized an additional \$5,000,000 for the project for the West Branch of the Susquehanna River Basin.

The House bill contained no such project.

The proposed conference substitute does not contain this authorization.

The Senate amendment authorized a project for the Fall Brook and Ayleworth Creek Reservoirs on the Lackawanna River at Scranton, Pa., at an estimated cost of \$3,596,000.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

The project for the Juniata River and tributaries, Pennsylvania, contained in the House bill specifically exempted the power features of such project from authorization and permitted the Chief of Engineers to submit a reexamination report on those features if he deems it desirable.

The Senate amendment did not specifically exempt the power features of the project from authorization but did provide that their installation shall not be made until the Chief of Engineers shall have submitted a reexamination report to Congress.

The proposed conference substitute is the same as the Senate amendment.

#### DELAWARE RIVER BASIN

The project for the Delaware River Basin, N.Y., N.J., Pa., and Del., was authorized in the House bill at an estimated cost of \$224,000,000.

The Senate amendment reduced the authorization to \$192,400,000.

The proposed conference substitute is the same as the Senate amendment.

#### MIDDLE ATLANTIC COASTAL AREA

The Senate amendment authorized a project for hurricane-flood protection and beach erosion control at Wrightsville Beach, N.C., at an estimated cost of \$345,000.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

#### CAPE FEAR RIVER BASIN

The Senate amendment contained a project for Cape Fear River Basin, N.C., at an estimated cost of \$25,143,000.

The House bill contained no such project.

The proposed conference substitute does not contain this authorization.

#### APALACHICOLA RIVER BASIN, GA.

The House bill authorized a project for the West Point Reservoir, Chattahoochee River, Ga., in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers, at an estimated cost of \$52,900,000.

The Senate amendment deleted the "Secretary of the Army and the".

The proposed conference substitute is the same as the Senate amendment.

The Senate amendment authorized a project for Flint River, Ga., at an estimated cost of \$151,820,000, with the proviso that this authorization is without prejudice to consideration by the Federal Power Commission of non-Federal development of power.

The House bill contained no such project.

The proposed conference substitute does not contain this authorization.

#### CENTRAL AND SOUTHERN FLORIDA

The Senate amendment provided an additional \$30,000,000 basin authorization for central and southern Florida.

The House bill did not contain this authorization.

The proposed conference substitute does not contain this authorization.

#### WEST PALM BEACH CANAL

The Senate amendment authorized a project for flood protection of West Palm Beach Canal, at an estimated cost of \$3,220,000.



The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

BOGGY CREEK, FLA.

The Senate amendment authorized a project for flood protection on Boggy Creek, Fla., at an estimated cost of \$1,176,000.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

SHINGLE CREEK, FLA.

The Senate amendment authorized a project for Shingle Creek, Fla., at an estimated cost of \$3,250,000, with the proviso that no obligation shall be incurred for the development of the Reedy Creek Swamp as a wildlife management area unless the State or another non-Federal entity agrees in advance to pay at least half the cost of that feature of the project.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

CUTLER DRAIN AREA, FLORIDA

The project for the Cutler drain area, Florida, contained in the House bill was modified by the Senate amendment through the inclusion of a proviso that local interests shall receive credit for moneys spent after March 1, 1960, for construction of units of the authorized plan for Cutler drain if that work is acceptable to the Chief of Engineers and if that credit does not exceed \$124,000.

The proposed conference substitute is the same as the Senate amendment, with a clerical amendment.

GREEN SWAMP REGION, FLA.

The project for the Four River Basins, Fla., authorized by the House bill was modified by the Senate amendment by a proviso that cost sharing shall be as recommended by the Secretary of the Army in House Document No. 585, 87th Congress. The Senate amendment also deferred the planning and construction on the Lowery-Mattie conservation area until a further report is made to Congress.

The proposed conference substitute is the same as the Senate amendment.

LOWER MISSISSIPPI RIVER BASIN

The Senate amendment modified the project for flood control and improvement of the lower Mississippi River adopted by the act of May 15, 1928, and subsequent acts to provide that monetary authorizations heretofore and hereafter made available to the projects shall be combined into a single sum and shall be available for application to any portion of the project.

The House bill contained no such modification.

The proposed conference substitute is the same as the Senate amendment.

## GIN AND MUDDY BAYOUS, YAZOO RIVER BASIN, MISS.

The authorization contained in the House bill for improvements in Gin and Muddy Bayous, Yazoo River Basin, Miss., were modified by the Senate amendment to provide that the plans for such improvements be subject to approval by the Secretary of the Army and the President.

The proposed conference substitute is the same as the Senate amendment.

## BRAZOS RIVER BASIN

The Senate amendment authorized an additional \$21,000,000 for the Brazos River Basin.

The House bill contained no such authorization.

The proposed conference substitute does not contain this authorization.

## ARKANSAS RIVER BASIN

The Senate amendment authorized an additional \$182,000,000 for the Arkansas River Basin.

The House bill contained no such authorization.

The proposed conference substitute does not contain this authorization.

## ARKANSAS RIVER BETWEEN MUSKOGEE, OKLA., AND COWETA, OKLA.

The Senate amendment authorized and directed the Secretary of the Army to make a study of bank erosion on the Arkansas River between Muskogee, Okla., and Coweta, Okla., and authorized such projects as the Chief of Engineers, the Secretary of the Army, and the President approved, unless within 60 days after the submission of the report thereon to the Congress such report is disapproved by Congress.

It provided the usual requirements for cooperation by local interests, except that with respect to any work found justified within the vicinity of Wybark, Okla., local interests shall make a cash contribution of not less than \$150,000 which shall include the value of all lands, easements, and rights-of-way required to be furnished, and the value of goods and services provided for purposes of project installation on a basis acceptable to the Chief of Engineers.

The House bill contained no such provision.

The proposed conference substitute is the same as the Senate amendment, except that the language has been modified to make it clear that the advance authorization of the bank erosion projects has been adopted because of their emergency nature. The conference substitute also limits to \$2,000,000 the Federal costs under this authorization.

## BIG HILL CREEK, KANS.

The Senate amendment authorized the project for flood protection on Big Hill Creek, Kans., at an estimated cost of \$3,785,000.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.



## KAW RESERVOIR, ARKANSAS RIVER, OKLA.

The project for the Kaw Reservoir, Arkansas River, Okla., authorized by the House bill, was modified by the Senate amendment to include a proviso that nothing in this act shall be construed to authorize the acquisition of additional lands for the establishment of a national wildlife refuge at the reservoir.

The proposed conference substitute is the same as the Senate amendment.

## WHITE RIVER BASIN

The Senate amendment authorized an additional \$11,000,000 for the White River Basin.

The House bill contained no such authorization.

The proposed conference substitute does not contain this authorization.

## RED RIVER BASIN

The Senate amendment modified the general plan for flood control on the Red River below Denison Dam to permit the Chief of Engineers to adjust local cooperation requirements of the McKinney Bayou, Ark. and Tex., Maniece Bayou, Ark., and East Point, La., projects to bring them into accord with the recommendations of the Secretary of the Army and the approval of the President.

The House bill contained no such modification.

The proposed conference substitute is the same as the Senate amendment except that the adjustment is required to be made at the earliest practicable date.

The Senate amendment authorized a project for Sanders, Big Pine, and Collier Creeks, Tex., at an estimated cost of \$16,100,000, subject to the recommendation of the Chief of Engineers and Secretary of the Army, and approval by the President.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

## MISSOURI RIVER BASIN

The Senate amendment authorized an additional \$140,000,000 for the Missouri River Basin.

The House bill contained no such additional authorization.

The proposed conference substitute does not contain this authorization.

The Senate amendment authorized the project for flood protection on White Clay Creek, Atchison, Kans., at an estimated cost of \$3,495,000.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

The Senate amendment authorized the project for Grand River and tributaries, North and South Dakota, at an estimated cost of \$2,670,000, with the requirement that the project be constructed, operated and maintained by the Chief of Engineers under the direction of the Secretary of the Army.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

The Senate amendment modified the requirements of local cooperation on the project for flood control on the Floyd River, Iowa, to require that local interests (1) furnish without cost to the United States all necessary lands, easements, and rights-of-way, (2) hold the United States free from damages due to construction, (3) make without cost to the United States all necessary road, highway, highway bridges (other than those required to carry Interstate Highway 29) over the relocated Floyd River, and utility, alterations, and additions, (4) contribute in cash 0.84 percent of the estimated first cost of the work (approximately \$65,000), (5) take all possible action to prevent increase of the overall cost of the project, and (6) maintain and operate the completed work in accordance with regulations of the Secretary of the Army.

The House bill did not modify these requirements of local cooperation on this project.

The proposed conference substitute is the same as the Senate amendment.

#### OHIO RIVER BASIN

The Senate amendment authorized an additional \$120,000,000 for the Ohio River Basin.

The House bill contained no such authorization.

The proposed conference substitute does not contain this authorization.

The Senate amendment authorized the project on the Wabash River near Mount Carmel, Ill., at an estimated cost of \$1,417,000.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

The Senate amendment authorized the project for the Big South Fork of the Cumberland River, Ky. and Tenn., at an estimated cost of \$151,000,000.

The House bill contained no such project.

The proposed conference substitute does not contain this authorization.

#### SCIOTO RIVER, OHIO

The House bill authorized the project for the Scioto River, Ohio, substantially in accordance with the recommendations of the Chief of Engineers at an estimated cost of \$55,847,000.

The Senate amendment authorized this project in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers at an estimated cost of \$55,307,000 with a proviso that nothing in the act shall be construed to authorize the acquisition of additional lands for the establishment of a wildlife refuge in this project.

The proposed conference substitute follows the House bill with respect to the authorization, follows the Senate amendment limiting the cost to \$55,307,000, and adopts the proviso in the Senate amendment.



## SALINE RIVER, ILL.

The House bill modified the project for the Saline River and tributaries, Illinois, to eliminate the requirement that there be a cash contribution by local interests and to provide that other items of local cooperation heretofore recommended by the Chief of Engineers still be applicable.

The Senate amendment modified that project to authorize the Chief of Engineers to adjust the cash contributions required of local interests to such amount as is recommended by the Secretary of the Army and approved by the President.

The proposed conference substitute is the same as the Senate amendment, except that the adjustment is required to be made at the earliest practicable date.

## UPPER MISSISSIPPI RIVER BASIN

The Senate amendment authorized an additional \$31,000,000 for the Upper Mississippi River Basin.

The House bill contained no such authorization.

The proposed conference substitute does not contain this authorization.

The Senate amendment authorized a project on the Rock River at Rockford, Ill., at an estimated cost of \$7,228,000.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

The Senate amendment authorized the project for the Mississippi River urban areas from Hampton, Ill., to mile 300 at an estimated cost of \$9,289,000.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

## GILA RIVER BASIN

The Senate amendment authorized the project for the Camelsback Reservoir, Gila River, Ariz., at an estimated cost of \$9,770,000. It also authorized the project on the Gila River below Painted Rock Reservoir, Ariz., at an estimated cost of \$18,255,000. It further authorized the project on Pinal Creek, Ariz., at an estimated cost of \$1,300,000.

The House bill contained none of these projects.

The proposed conference substitute is the same as the Senate amendment.

## SAN FRANCISCO BAY AREA

The authorization of the project Corte Madera Creek, Marin County, Calif., contained by the House bill was modified by the Senate amendment by the addition of a requirement that local interests contribute in cash 3 percent of the Federal construction of the Rose Valley unit (approximately \$158,000).

The proposed conference substitute is the same as the Senate amendment.

## SAN JOAQUIN RIVER BASIN

Both the House bill and the Senate amendment authorized a modification of the New Melones project, Stanislaus River, Calif., at an estimated cost of \$113,717,000. In addition, the House bill contained certain requirements with respect to this project which were eliminated by the Senate amendment. These requirements were as follows:

1. Upon completion, the project would become a part of the Central Valley project and be operated and maintained by the Secretary of the Interior in accordance with reclamation laws, except flood control operations.

2. The Stanislaus River Channel from Goodwin Dam to the San Joaquin River would be maintained by the Secretary of the Army to a capacity of at least 8,000 cubic feet per second, subject to local interests maintaining private levees.

3. Before diverting any water from the Stanislaus River Basin in connection with the operation of the Central Valley project, the Secretary of the Interior would determine water requirements to meet all present and future needs in that basin and subordinate diversions to the quantities so determined.

4. The Secretary of the Army would take necessary action to ensure preservation of fish and wildlife on the project and allocate to that project an appropriate share of the construction costs which would be nonreimbursable.

5. The Secretary of the Army would construct basic public recreation facilities including necessary land acquisition, and the cost thereof would be nonreimbursable and nonreturnable.

6. Contracts for the sale and delivery of electric energy available from the Central Valley power system as a result of the plants authorized by this section and their integration with the Central Valley system would be made in accordance with preferences set forth in the Federal reclamation laws, except that a first preference of up to 25 percent of the additional energy would be given under the reclamation laws to preferred customers in Tuolumne and Calaveras Counties, Calif., for use in those counties if such customers are ready, able, and willing within 1 year of notice of availability by the Secretary to enter into contracts for such energy, and such preference customers may exercise their option on the same date in each successive fifth year if written notice of such intention to so use the energy is given to the Secretary at least 18 months before such date.

7. The Secretary of the Army would give consideration during preconstruction planning of the project to the advisability of including storage for the regulation of streamflow for the purposes of downstream water control.

The proposed conference substitute is the same as the House bill except that requirement No. 4 relating to costs of fish and wildlife preservation is revised to eliminate the nonreimbursable provision and requirement No. 6 relating to preferential sales of electric energy is revised to provide that such first preference shall be given to the extent needed and fixed by the Secretary of the Interior but not to exceed 25 percent of such energy shall be given first preference.

The Senate amendment authorized a project on Mormon Slough, Calaveras River, Calif., at an estimated cost of \$1,960,000.



The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

#### LOS ANGELES RIVER BASIN

The House bill authorized an additional \$3,700,000 for the Los Angeles River Basin.

The Senate amendment provided an authorization for the Los Angeles River Basin of \$38,000,000.

The proposed conference substitute follows the House version.

#### ROGUE RIVER BASIN

The project for the Rogue River, Oreg. and Calif. authorized by the House bill was modified by the Senate amendment (1) to require that the authorization be subject to the conditions of local cooperation specified in the report of the Chief of Engineers published as House Document No. 566, 87th Congress, and (2) by the elimination of the requirement in the House bill that water for all purposes shall be released in the quantities and qualities at the points described in the district engineer's report and its appendixes.

The proposed conference substitute is the same as the Senate amendment.

#### COLUMBIA RIVER BASIN

The Senate amendment provided an additional authorization of \$226,000,000 for the projects and plans for the Columbia River Basin including the Willamette River Basin and modified those projects and plans to include the following listed projects:

Knowles Dam and Reservoir, Flathead River, Mont.;

China Gardens Dam, Snake River, Idaho and Oreg.;

Asotin Dam, Snake River, Idaho and Wash.;

Bruces Eddy Dam and Reservoir, North Fork, Clearwater River, Idaho;

Strube Reregulating Dam and Reservoir, South Fork, McKenzie River, Oreg.;

Gate Creek Dam and Reservoir, Gate Creek, Oreg.;

Fern Ridge Dam and Reservoir modification, Long Tom River, Oreg.;

Cascadia Dam and Reservoir, South Santiam River, Oreg.

The Senate amendment also provided that the depth and width of the Columbia-Snake River barge navigation project channel be established as 14 feet and 250 feet, respectively, at minimum regulated flow.

It further provided that Knowles Dam and Reservoir, Flathead River, Mont., be constructed, operated, and maintained by the Bureau of Reclamation and authorizes \$50,000,000 for partial accomplishment of that project.

The House bill authorized the project for the Asotin Dam and Reservoir, Snake River, at an estimated cost of \$99,818,000 and the project for the China Gardens Dam and Reservoir, Snake River, at an estimated cost of \$74,777,000. These projects were within the larger group authorized by the Senate amendment.

The proposed conference substitute is the same as the Senate amendment except: (1) the additional authorization of \$226,000,000 for proj-

ects and plans for the Columbia River Basin is omitted; and (2) the following listed projects contained in the Senate amendment are deleted:

Knowles Dam and Reservoir, Flathead River, Mont.; and China Gardens Dam, Snake River, Idaho and Oreg.

In taking its action authorizing Bruces Eddy Dam and Reservoir, North Fork, Clear Water River, Idaho, the conferees were aware of the objections that have been made to this project by numerous groups interested in fish and wildlife conservation. It is the intention of the conferees that the Secretary of the Army shall adopt appropriate measures to insure the preservation and propagation of fish and wildlife affected by this project, and shall allocate to the preservation and propagation of fish and wildlife, as provided in the act of August 14, 1946 (60 Stat. 1080), an appropriate share of the cost of constructing this project and of operating and maintaining the same.

The Senate amendment authorizes the project for Burns Creek Dam and Reservoir, Snake River, Idaho, at an estimated cost of \$52,000,000.

The House bill did not authorize this project.

The proposed conference substitute does not contain this authorization.

#### WYNOOCHEE RIVER

The Senate amendment authorized the project for the Wynoochee River, Wash., at an estimated cost of \$40,211,000 with the requirement that the power generating facilities shall not be installed until a re-examination report has been submitted to Congress. The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

#### COOK INLET, ALASKA

The House bill authorizes a project for Bradley Lake, Cook Inlet, Alaska, at a cost of \$45,750,000.

The Senate amendment modified this authorization to require that the operation and maintenance of the project shall be through the Secretary of the Interior.

The proposed conference substitute is the same as the House bill.

#### SNETTISHAM PROJECT

The House bill did not contain an authorization for the Snettisham project.

Subsection (a) of section 204 of the Senate amendment authorizes the Secretary of the Army, acting through the Chief of Engineers, to construct, and the Secretary of the Interior to operate and maintain, the Crater-Long Lakes division of the Snettisham project near Juneau, Alaska, at an estimated cost of \$41,634,000.

Subsection (b) of section 204 of the Senate amendment directs the Secretary of the Interior to dispose of electric power and energy so as to encourage the most widespread use thereof at the lowest possible rates consistent with sound business principles. It requires rate schedules to be so drawn as to have due regard to the recovery of costs



of producing and transmitting the energy, including amortization of capital with interest. Preference in the sale of power and energy is to be given Federal agencies, public bodies, and cooperatives, and it is to be a condition of every contract of sale to a purchaser for resale that such purchaser will deliver power and energy to Federal agencies within its transmission area at a reasonable charge for the use of its transmission facilities. All receipts are to be covered into the Treasury as miscellaneous receipts.

Subsection (c) of such section 204 authorizes the appropriate Secretary to make necessary rules, regulations, and agreements, and otherwise do such things as may be necessary, to carry out the purposes of the provision.

The proposed conference substitute is the same as the Senate amendment.

#### WAURIKA PROJECT

The House bill did not contain any provision authorizing the Waurika reclamation project.

Section 205 of the Senate amendment authorized the Secretary of the Interior to construct, operate, and maintain the Waurika reclamation project, Oklahoma; provided for allocation of the cost of this project among a number of purposes; authorized transfer to a water users' organization the care, operation, and maintenance of certain works; authorized construction of certain recreational facilities; and authorized an appropriation of \$25,019,500 for construction, and a continuing authorization for operation and maintenance.

The proposed conference substitute does not contain this provision.

#### SMALL PROJECTS

The House bill amended section 205 of the Flood Control Act of 1948 to increase the scope of application of that provision of law. The House bill, among other things, increased from \$400,000 to \$2,000,000 the ceiling upon the amount authorized to be allocated to a project in any one locality and provided that no construction should be undertaken under this section on a project with a Federal cost in excess of \$1,000,000, unless that project had been approved by resolutions adopted by the Committees on Public Works of the House of Representatives and the Senate, respectively.

The Senate amendment reduced to \$1,000,000 the amount which can be allocated to a project for any one locality and eliminated completely the provisions relating to approval by resolutions of the committees of the Congress.

The proposed conference substitute is the same as the Senate amendment.

#### EMERGENCY FUND

Section 207 of the Senate amendment amends section 5 of the Flood Control Act approved August 18, 1941, to extend the application of the emergency fund authorized in that section to emergency conditions relating to federally authorized hurricane or shore protection necessary to protect against imminent and substantial loss of life and property, and for the repair and restoration of any federally authorized hurricane or shore protective structure damaged or destroyed by wind,

wave, or water action of other than an ordinary nature when necessary in the discretion of the Chief of Engineers for the adequate functioning of the structure for hurricane or shore protection.

The House bill contained no such provision.

The proposed conference substitute is the same as the Senate amendment.

#### PARK AND RECREATIONAL FACILITIES

Section 208 of the Senate amendment amends section 4 of the act of December 22, 1944, as amended, to revise existing law relating to the authority of the Secretary of the Army to construct, maintain, and operate public parks and recreational facilities.

This revision is essentially the same as existing law, except that—

1. Existing law is expanded to include recreational facilities not only in reservoir areas but also in any water resource development project under the control of the Army.

2. The construction, maintenance, and operation of recreational facilities is authorized to be carried out by local interests (particularly those to be operated and maintained by such interests).

The House bill contained no such provision.

The proposed conference substitute is the same as the Senate amendment.

#### IMPROVEMENT, RECONSTRUCTION, AND MAINTENANCE OF PUBLIC ROADS

Section 209 of the Senate amendment amends section 207 of the Flood Control Act of 1960 to substitute a revision of existing law relating to utilization, construction, and relocation of public roads in connection with the construction of flood control, navigation, or multiple-purpose projects for the development of water resources.

This revision is essentially the same as existing law except that it has been expanded to include irrigation projects constructed by the Bureau of Reclamation and a provision has been added that whenever a substitute road is to be constructed, if a State or political subdivision thereof requires that it be constructed to a higher standard than would otherwise be applicable and the requesting State or political subdivision pays, before the beginning of construction, the additional necessary costs, then such road is authorized to be constructed at the requested higher standard. Federal costs under section 207(c) of the Flood Control Act of 1960 are to be part of the nonreimbursable project costs.

The House bill contains no provision on this subject.

The proposed conference substitute is the same as the Senate amendment.

#### SAVANNAH RIVER

Both the House bill and the Senate amendment grant to Duke Power Co. authority to construct, maintain, and operate a dam across the Savannah River between Anderson County, S.C., and Elbert County, Ga.

The proposed conference substitute deletes this authorization.



## TROTTERS SHOAL RESERVOIR

Section 210(b) of the Senate amendment authorized the project for Trotters Shoal Reservoir on the Savannah River at an estimated cost of \$78,700,000 subject to the approval of the President.

The House bill contained no such provision.

The proposed conference substitute does not contain this provision.

## FLOOD CONTROL SURVEYS

Section 211 of the Senate amendment authorized the same surveys for flood control as were contained in the House bill, and added other surveys.

## ARKANSAS RIVER BASIN

The Senate amendment authorized a survey for flood control of the Arkansas River Basin, with reference to the effect of Eufaula and Keystone Reservoirs, Okla., on the water supply facilities of the cities of McAlester and Yale, respectively, to determine the extent of Federal participation in the replacement of such facilities in equity without regard to other limitations.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment, but changes the phrase "the extent of Federal participation" to read "the extent, if any, of Federal participation" in order to make it clear that this legislation does not constitute a commitment that there will necessarily be any such Federal participation.

## CUMBERLAND RIVER

The Senate amendment authorized a survey for flood control of the Cumberland River, Ky. and Tenn., with reference to the effect of the Barkley Dam project, on the water supply and sewage treatment facilities of Cadiz, Kuttawa, and Eddyville, Ky., and the State penitentiary at Eddyville, Ky., with a view to determining the extent of Federal participation in replacement of such facilities in equity without regard to existing limitations.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment, but changes the phrase "the extent of Federal participation" to read "the extent, if any, of Federal participation" in order to make it clear that this legislation does not constitute a commitment that there will necessarily be any such Federal participation.

## MISSOURI RIVER BASIN

The Senate amendment authorized a survey for flood control of the Missouri River Basin, with reference to the effect of Oahe and Garrison Reservoirs, North and South Dakota, on the sewage treatment facilities of Bismarck and Mandan, N. Dak., respectively, with a view to determining the extent of Federal participation in the sewage treatment facilities without regard to existing limitations.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment, but changes the phrase "the extent of Federal participation" to read "the extent, if any, of Federal participation" in order to make it clear that this legislation does not constitute a commitment that there will necessarily be any such Federal participation.

#### KASKASKIA RIVER LEVEES

The Senate amendment authorized with respect to the Kaskaskia River levees, Illinois, a review of requirements of local cooperation. The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment.

#### PUGET SOUND, WASHINGTON

The Senate amendment authorized a survey of Puget Sound, Wash., in the interest of flood control, navigation, and other water uses and related land resources.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment.

#### HARBORS AND RIVERS IN HAWAII

The Senate amendment authorized a survey of harbors and rivers in Hawaii.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment.

#### WAIMEA RIVER, KOKEE AREA, KAUAI, HAWAII

The Senate amendment authorized a survey for multiple purposes of Waimea River, Kokee area, Kauai, Hawaii.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment.

#### WAIPIO RIVER, ISLAND OF HAWAII

The Senate amendment authorized a survey for multiple purpose development of Waipio River, Kohala-Hamakua coast, island of Hawaii.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment.

#### I AO RIVER, HAWAII

The Senate amendment authorized a survey of Iao River, Wailuku, Maui, Hawaii.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment.

#### MISSOURI RIVER BASIN

Section 212 of the Senate amendment authorizes an additional \$100,000,000 for continuing the works in the Missouri River Basin to be



undertaken by the Secretary of the Interior under the comprehensive plan adopted by section 9(a) of the act approved December 22, 1944.

The House bill did not contain such authorization.

The proposed conference substitute does not contain this authorization.

#### CHICOT COUNTY BRIDGES

Section 213 of the Senate amendment authorizes the Secretary of the Army to replace the bridge over Boeuf River, Chicot County, Ark., approximately 3 miles north of the county line, and the bridge over Big Bayou, Chicot County, Ark., approximately 2 miles upstream from its confluence with the Boeuf River which were destroyed recently by floods at an estimated cost of \$115,000.

The House bill did not authorize these bridges.

The proposed conference substitute is the same as the Senate amendment.

#### WILKESBORO RESERVOIR

Section 214 of the Senate amendment designates the Wilkesboro Reservoir as the W. Kerr Scott Dam and Reservoir in honor of the late Senator Scott of North Carolina.

The House bill did not contain this provision.

The proposed conference substitute is the same as the Senate amendment.

### TITLE III—WABASH BASIN INTERAGENCY WATER RESOURCES COMMISSION

The Senate amendment contained a title III which establishes the Commission to be known as the Wabash Basin Interagency Water Resources Commission.

Subsection (a) of section 302 recites the necessity for a full and complete investigation and study and survey of land and water resources within the Wabash River Basin consisting of the watershed of the entire Wabash River and its tributaries, located within the States of Indiana and Illinois.

Subsection (b) of section 302 provides the Commission will be the principal agency for coordination of Federal, State, and local plans for this basin, will prepare and keep up to date the comprehensive integrated joint plan for such basin; will recommend a long-range schedule of priorities for collection and analysis of basic data, for investigation and project planning, and for construction of projects in the basin; and will foster and undertake studies of water resources problems in the basin.

Section 303 provides for the composition and appointment of the Commission.

Section 304 provides for the organization and administration of the Commission.

Section 305 provides the functions and duties of the Commission. These are as follows: (1) to engage in such activities, and make such studies and investigations necessary or desirable to carry out section 302, (2) to submit annually to the President, Congress, and other interested agencies a report on its work, and (3) to submit, after

proper clearance with interested agencies, to the President, a comprehensive integrated joint plan for water and related resources development in the Wabash Basin.

Subsection (b) of section 305 provides for periodic reports by individual members of the Commission to the agencies or States or other commissions from which he was appointed.

Section 306 provides the necessary authority to hold hearings, take testimony, print and distribute proceedings and reports, acquire space, and other necessary authority to carry out the provisions of this title, including the appointment of personnel.

Section 307 provides that members of the Commission appointed from agencies of the Federal Government shall receive no additional compensation and that certain other members of the Commission shall receive compensation at the rate of \$75 per day but not more than \$7,500 in any 1 year.

The House bill contains no such provision.

The proposed conference substitute does not contain this title.

#### EARLY HEARINGS

The managers on the part of the House made a commitment that the Committee on Public Works of the House would hold public hearings as soon as practicable after the next Congress convenes on the following projects which were considered by the conferees and which are not included in this conference report: Cape Fear River Basin, N.C.; Flint River, Ga.; the South Fork of the Cumberland River, Ky. and Tenn.; Knowles Dam and Reservoir, Flathead River, Mont.; Burns Creek Dam and Reservoir, Snake River, Idaho; Waurika Reclamation project, Oklahoma; Savannah River-Duke Power Co., South Carolina and Georgia, and Trotter's Shoal Reservoir, Savannah River.

CLIFFORD DAVIS,  
JOHN A. BLATNIK,  
ROBERT E. JONES,  
WILLIAM C. CRAMER,  
JOHN F. BALDWIN, Jr.

*Managers on the Part of the House.*





Ernst Papanek, board of directors, LID, 1955—; director, Wiltwyck School.

Herbert W. Payne, board of directors, LID, 1946-52; treasurer 1948-52; late vice president, Textile Workers Union of America (deceased).

Dorothy Pearson, executive committee, New York chapter, LID; active in liberal movements.

Orlie Pell, board of directors, LID; education and research associate, American Labor Education Services.

Elsie Cole Phillips, executive committee, ISS, 1910-14; vice president, 1910-11.

William Pickens, board of directors, LID, 1923-42; author; former field secretary, NAACP (deceased).

Ernest Poole, executive committee, ISS, 1908-18; vice president, 1912-18; novelist; winner, Pulitzer Prize (deceased).

J. S. Potofsky, board of directors, LID, 1925-26; president, ACWA.

Eliot D. Pratt, board of directors, LID, 1948-52; national council; chairman, board of trustees, Goddard College.

Sherman D. Pratt, national council, LID; publicist.

Paul W. Preisler, national council, LID, teacher; attorney.

Carl Rachlin, board of directors, LID since 1950; former president New York chapter; labor and civil liberties attorney.

Walter Rautenstrauch, former board of directors, LID; professor of industrial engineering, Columbia (deceased).

Cleveland Rodgers, board of directors, LID, in forties; formerly editor, Brooklyn Eagle, and member New York City Planning Commission.

George E. Roewer, formerly Boston chapter; legal consultant; labor lawyer.

Eleanor Roosevelt, recipient of LID award, 1953; "First Woman of the World."

George Ross, board of directors, LID since 1948; businessman; secretary, People's Educational Camp Society.

I. M. Rubinow, executive committee, ISS, 1913-17; authority on social insurance.

Charles Edward Russell, frequent lecturer for league; author; writer.

Stanley Ruttenberg, board of directors, LID, 1950-52; director of research and education, CIO.

Helen Sahler, former secretary, New York chapter; sculptor; painter (deceased).

Mary R. Sanford, executive committee, ISS, 1907-38; treasurer, 1916-19; vice president, LID, 1938-48; publicist.

Joseph Schlossberg, board of directors, LID, 1940—; treasurer, 1945—; secretary-treasurer, emeritus, ACWA; member, Board of Higher Education, New York City.

Karl Scholz, national council, LID; professor of economics, University of Pennsylvania.

Adelaide Schulkind, vice president, New York chapter, 1954—; secretary, League for Mutual Aid.

Leroy Scott, secretary, ISS, 1910-17; writer; novelist.

Vida D. Scudder, executive committee, ISS, 1912-16; vice president, LID, 1921-54; late professor of English literature, Wellesley (deceased).

H. D. Sedgwick, executive committee, ISS, 1912-17; educator; writer (deceased).

Bert Seidman, former chairman, Washington chapter; research department, AFL.

Toni Sender, frequent league lecturer; representative of International Confederation of Trade Unions at U.N.

Boris Shishkin, board of directors, LID; economist, AFL.

Upton Sinclair, founder; vice president, ISS, 1905-17; novelist.

Winifred Smith, national council, LID; former professor of English, Vassar.

George Soule, board of directors, LID; author; economist; professor of economics, Bennington College.

John Spargo, executive committee, ISS, 1916-19; writer.

Sterling Spero, board of directors, LID; professor of public administration, New York University.

Sidney Stark, Jr., national council, LID; businessman.

Sidney Stark, long LID cooperator; businessman.

Lincoln Steffens, frequent lecturer, LID; writer (deceased).

Charles P. Steinmetz, vice president, LID, 1921-24; inventor, "electric wizard" (deceased).

Helen Phelps Stokes, executive committee, ISS, 1907-21; board of directors, 1921-40; vice president, 1940 (deceased).

J. G. Phelps Stokes, executive committee, ISS, 1905-18; president, 1907-18; publicist.

Benjamin Stolberg, former board of directors, LID; writer (deceased).

George Streator, national council, LID; former board of directors; labor editor.

Caro Lloyd Strobell, executive committee, ISS, 1913-21; writer.

Louis Stulberg, board of directors, LID; manager Local 66, ILGWU.

Norman Thomas, executive committee, ISS, 1918-21; board of directors, LID since 1921; executive committee, 1922-36; Socialist leader; author; lecturer; chairman, Post War World Council.

John Thurber, former chairman, Washington chapter, LID; labor statistician and historian.

Richard C. Tolman, University of Illinois, ISS, physicist (deceased).

Ashley L. Totten, board of directors, LID, 1951—; secretary-treasurer, Brotherhood of Sleeping Car Porters.

Oswald Garrison Villard, board of directors, LID, 1933-34; former editor and publisher, the Nation (deceased).

B. Charney Vladeck, board of directors, LID in thirties; business manager, Jewish Daily Forward; former New York City Councilman (deceased).

Stephen Vladeck, board of directors, LID, 1955—; labor attorney.

William C. Vladeck, board of directors, 1953-55; architect.

Thorstein Veblen, National Council, 1925-29; sociologist (deceased).

Anna Strunsky Walling, active member since 1905.

L. Metcalfe Walling, board of directors, LID, 1948-52; former administrator, Fair Labor Practices; attorney.

William English Walling, executive committee, ISS, 1912-18; author; social scientist (deceased).

Agnes A. Warbasse, board of directors, 1925-26; leading cooperator (deceased).

Arthur Warner, board of directors, LID, 1921-23; writer, editor (deceased).

Adolph Warshaw, formerly board of directors, LID; businessman (deceased).

Morris Weisz, national council, LID; labor economist.

Mildred Perlman Westover, secretary, SLID, 1952-53; board of directors, 1953-55.

Bertha Poole Weyl, board of director, LID, 1922-45; vice president since 1945; housewife.

Bouck White, executive committee, ISS, 1912-15; author (deceased).

Samuel S. White, national council; labor-management relations.

Pearl Willen, board of directors, LID, since 1952; lecturer; social service.

Norman Williams, Jr., board of directors, LID; legal department, New York City Planning Commission.

William Withers, national council, LID; professor of economics, Queens College.

Herman Wolf, board of director, 1953-55; public relations.

Helen Sumner Woodbury, executive committee, ISS, and director, 1917-24; labor economist (deceased).

Louis Yagoda, executive committee, New York chapter; New York State Board of Mediation.

Phil Ziegler, national council, LID; editor, Railway Clerk.

Savel Zimand, board of directors, LID; 1921-24; writer; health educator.

Charles Zimmerman, board of directors, LID; vice president, ILGWU; manager, local 22.

Charles Zueblin, executive committee, ISS, 1916-21; author, lecturer (deceased).

## RECESS

The SPEAKER. The Chair declares a recess subject to the call of the Chair.

Accordingly (at 1 o'clock and 6 minutes p.m.) the House stood in recess subject to the call of the Chair.

## AFTER RECESS

The recess having expired, the House was called to order by the Speaker at 8 o'clock and 35 minutes p.m.

## FURTHER MESSAGE FROM THE SENATE

A further message from the Senate, by Mr. McGown, one of its clerks, announced that the Senate agrees to the amendment of the House to a bill of the Senate of the following title:

S. 3453. An act for the relief of Dr. Felix Nabor Sabates.

The message also announced that the Senate agrees to the report of the committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H.R. 11586) entitled "An act to amend section 502 of the Merchant Marine Act, 1936, as amended."

## PUBLIC WORKS AUTHORIZATION BILL

Mr. DAVIS of Tennessee submitted the following conference report and statement on the bill (H.R. 13273) authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes:

### CONFERENCE REPORT (REPT. No. 2557)

The committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H.R. 13273) authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the House recede from its disagreement to the amendment of the Senate and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the Senate amendment insert the following:

### "TITLE I—RIVERS AND HARBORS

"SEC. 101. That the following works of improvement of rivers and harbors and other waterways for navigation, flood control, and other purposes are hereby adopted and authorized to be prosecuted under the direction of the Secretary of the Army and super-



vision of the Chief of Engineers, in accordance with the plans and subject to the conditions recommended by the Chief of Engineers in the respective reports hereinafter designated: *Provided*, That the provisions of section 1 of the River and Harbor Act approved March 2, 1945 (Public Law Numbered 14, Seventy-ninth Congress, first session), shall govern with respect to projects authorized in this title; and the procedures therein set forth with respect to plans, proposals, or reports for works of improvement for navigation or flood control and for irrigation and purposes incidental thereto, shall apply as if herein set forth in full:

#### Navigation

"Narraguagus River, Maine: House Document Numbered 530, Eighty-seventh Congress, at an estimated cost of \$500,000;

"Carvers Harbor, Vinalhaven, Maine: Senate Document Numbered 118, Eighty-seventh Congress, at an estimated cost of \$205,000;

"Searsport Harbor, Maine: House Document Numbered 500, Eighty-seventh Congress, at an estimated cost of \$700,000;

"Portland Harbor, Maine: House Document Numbered 216, Eighty-seventh Congress, at an estimated cost of \$8,340,000;

"Kennebunk River, Maine: House Document Numbered 459, Eighty-seventh Congress, at an estimated cost of \$270,000;

"Portsmouth Harbor and Piscataqua River, Maine and New Hampshire: House Document Numbered 482, Eighty-seventh Congress, at an estimated cost of \$7,500,000;

"Gloucester Harbor, Massachusetts: House Document Numbered 341, Eighty-seventh Congress, at an estimated cost of \$1,100,000;

"Marblehead Harbor, Massachusetts: House Document Numbered 516, Eighty-seventh Congress, at an estimated cost of \$1,752,000;

"Chelsea Harbor, Massachusetts: House Document Numbered 350, Eighty-seventh Congress, at an estimated cost of \$2,843,000;

"Dorchester Bay and Neponset River, Massachusetts: Senate Document Numbered 126, Eighty-seventh Congress, at an estimated cost of \$7,050,000;

"Plymouth Harbor, Massachusetts: Senate Document Numbered 124, Eighty-seventh Congress, at an estimated cost of \$1,200,000;

"Pawtuxet Cove, Rhode Island: House Document Numbered 236, Eighty-seventh Congress, at an estimated cost of \$210,000;

"Great Lakes to Hudson River Waterway, New York: River and Harbor Committee Document Numbered 20, Seventy-third Congress, for the further partial accomplishment of the approved plan there is hereby authorized to be appropriated, in addition to sums previously authorized, \$1,000,000;

"Little Neck Bay, New York: House Document Numbered 510, Eighty-seventh Congress, at an estimated cost of \$2,185,000;

"Flushing Bay and Creek, New York: House Document Numbered 551, Eighty-seventh Congress, at an estimated cost of \$1,695,000;

"Buttermilk Channel, New York: House Document Numbered 483, Eighty-seventh Congress, at an estimated cost of \$2,226,000;

"Newark Bay, Hackensack and Passaic Rivers, New Jersey (channels to Port Elizabeth): Modification of the existing navigation project authorized by the River and Harbor Act of 1954 (Public Law 780, Eighty-third Congress), House Document Numbered 252, is hereby authorized substantially in accordance with the plans being prepared by the Chief of Engineers, subject to the approval of such plans by the Secretary of the Army and the President;

"Raritan River, New Jersey: House Document Numbered 455, Eighty-sixth Congress, maintenance;

"Lynnhaven Inlet, Bay, and connecting waters, Virginia: House Document Numbered 580, Eighty-seventh Congress, at an estimated cost of \$1,068,000: *Provided*, That nothing in this Act shall be construed as authorizing reimbursement to local interests for the Long Creek-Broad Bay Canal Bridge;

"James River, Virginia: House Document Numbered 586, Eighty-seventh Congress at an estimated cost of \$39,000,000: *Provided*, That this authorization shall expire after a period of five years from the date of approval of this Act unless the Governor of Virginia has endorsed the project within that time: *And provided further*, That prior to construction, there will be submitted to the Congress a feasibility report which takes account of possible adverse effects of the project on seed oyster production;

"Rollinson Channel and channel from Hatteras Inlet to Hatteras, North Carolina: House Document Numbered 457, Eighty-seventh Congress, at an estimated cost of \$652,000;

"Wilmington Harbor, North Carolina: Senate Document Numbered 114, Eighty-seventh Congress, at an estimated cost of \$6,370,000;

"Savannah Harbor, Georgia: Senate Document Numbered 115, Eighty-seventh Congress, at an estimated cost of \$605,000;

"Canaveral Harbor, Florida: Senate Document Numbered 140, Eighty-seventh Congress, at the estimated cost of \$5,076,000;

"Key West Harbor, Florida: Senate Document Numbered 106, Eighty-seventh Congress, at an estimated cost of \$820,000;

"Tampa Harbor, Port Sutton and Ybor Channels, Florida: House Document Numbered 529, Eighty-seventh Congress, at an estimated cost of \$997,000;

"Walter F. George lock and dam, Alabama: Senate Document Numbered 109, Eighty-seventh Congress, at an estimated cost of \$600,000;

"Pensacola Harbor, Florida: House Document Numbered 528, Eighty-seventh Congress, at an estimated cost of \$424,000;

"Holt lock and dam, Alabama: The Secretary of the Army is hereby authorized and directed to cause an immediate study to be made under the direction of the Chief of Engineers with a view to providing hydroelectric power generating facilities in said dam, and his report on such study shall be submitted to the Congress by the Secretary of the Army within the first period of sixty calendar days of continuous session of the Eighty-eighth Congress;

"Pascagoula Harbor, Mississippi: House Document Numbered 560, Eighty-seventh Congress, at an estimated cost of \$4,870,000;

"Mississippi River, Baton Rouge to Gulf of Mexico, Louisiana: Senate Document Numbered 36, Eighty-seventh Congress, at an estimated cost of \$357,000;

"The project, Mississippi River, Baton Rouge to the Gulf of Mexico, barge channel through Devils Swamp, Louisiana (Baton Rouge Harbor), authorized by the River and Harbor Act of 1946, in accordance with the recommendations of the Chief of Engineers in House Document Numbered 321, Eightieth Congress, as amended by the Flood Control Act of 1948, is hereby further amended to provide for the provision as required, of suitable dikes and other retaining structures at a Federal cost of \$299,500, for the construction and future maintenance of the project, in order to provide additional industrial sites with water frontage which are now needed to permit the normal development and expansion of the industrial and commercial activities of the locality: *Provided*, That local interests contribute the sum of \$100,500 toward the cost of the work;

"Bayous Terrebonne, Petit Caillou, Grand Caillou, Du Large, and connecting channels, Louisiana, and Atchafalaya River, Morgan City to Gulf of Mexico: House Document Numbered 583, Eighty-seventh Congress, at an estimated cost of \$45,000;

"Gulf Intracoastal Waterway, Louisiana and Texas: House Document Numbered 556, Eighty-seventh Congress, at an estimated cost of \$25,540,000: *Provided*, That the authority to make such modifications as in the discretion of the Chief of Engineers may

be advisable, as set forth in House Document Numbered 556, Eighty-seventh Congress, shall be interpreted to apply to, but not limited to, the improvement of the existing channels at proposed channel relocation sites in lieu of such relocations;

"Calcasieu River salt water barrier, Louisiana: House Document Numbered 582, Eighty-seventh Congress, at an estimated cost of \$3,310,000: *Provided*, That the Corps of Engineers is directed to study the question of cost sharing taking into account that measures for mitigation of damages from navigation improvements will be a Federal responsibility and enhancement effects will be shared on the basis of a 50 per centum Federal and 50 per centum non-Federal; such cost sharing is hereby authorized as determined to be feasible and justified by the Chief of Engineers and Secretary of the Army within the first period of sixty calendar days of continuous session of the Congress after the date on which the report is submitted to it unless such report is disapproved by the Congress;

"Mississippi River at Clarksville, Missouri: House Document Numbered 552, Eighty-seventh Congress, at an estimated cost of \$103,300;

"Sandy Slough, Lincoln County, Missouri: House Document Numbered 419, Eighty-seventh Congress, at an estimated cost of \$195,000;

"Sabine-Neches Waterway, Texas: House Document Numbered 553, Eighty-seventh Congress, at an estimated cost of \$20,830,000;

"Trinity River, Wallisville Reservoir, Texas: House Document Numbered 215, Eighty-seventh Congress, at an estimated cost of \$9,162,000: *Provided*, That nothing in this Act shall be construed as authorizing the acquisition of additional lands for establishment of a national wildlife refuge at the reservoir;

"Gulf Intracoastal Waterway, channel to Palacios, Texas: House Document Numbered 504, Eighty-seventh Congress, at an estimated cost of \$818,000;

"Gulf Intracoastal Waterway, channel to Victoria, Texas: House Document Numbered 288, Eighty-seventh Congress, at an estimated cost of \$1,590,000;

"Illinois Waterway, Illinois and Indiana: House Document Numbered 31, Eighty-sixth Congress, is approved and there is hereby authorized the sum of \$40,000,000 for initiation and partial accomplishment of the project;

"Kaskaskia River, Illinois: Senate Document Numbered 44, Eighty-seventh Congress, at an estimated cost of \$58,200,000;

"Mississippi River between Missouri River and Minneapolis, Minnesota: House Document Numbered 513, Eighty-seventh Congress, at an estimated cost of \$1,205,000;

"Ontonagon Harbor, Michigan: House Document Numbered 287, Eighty-seventh Congress, at an estimated cost of \$4,741,000;

"Muskegon Harbor, Michigan: House Document Numbered 474, Eighty-seventh Congress, at an estimated cost of \$609,000;

"Leland Harbor, Michigan: House Document Numbered 413, Eighty-seventh Congress, at an estimated cost of \$485,000;

"Little Bay De Noc, Gladstone Harbor and Kipling, Michigan: House Document Numbered 480, Eighty-seventh Congress, at an estimated cost of \$350,000;

"Green Bay Harbor, Wisconsin: House Document Numbered 470, Eighty-seventh Congress, at an estimated cost of \$4,270,000;

"Kenosha Harbor, Wisconsin: House Document Numbered 496, Eighty-seventh Congress, at an estimated cost of \$673,000;

"Manitowoc Harbor, Wisconsin: House Document Numbered 479, Eighty-seventh Congress, at an estimated cost of \$719,000;

"Milwaukee Harbor, Wisconsin: House Document Numbered 134, Eighty-seventh Congress, at an estimated cost of \$4,029,000;



"Chicago Harbor, Illinois: House Document Numbered 485, Eighty-seventh Congress, at an estimated cost of \$1,505,000;

"Calumet Harbor and River, Illinois and Indiana: House Document Numbered 581, Eighty-seventh Congress, at an estimated cost of \$11,464,000;

"New Buffalo Harbor, Michigan: House Document Numbered 481, Eighty-seventh Congress, at an estimated cost of \$667,000;

"Caseville Harbor, Michigan: House Document Numbered 64, Eighty-seventh Congress, at an estimated cost of \$327,000;

"Saginaw River, Michigan: House Document Numbered 544, Eighty-seventh Congress, at an estimated cost of \$4,780,000;

"Rouge River, Michigan: House Document Numbered 509, Eighty-seventh Congress, at an estimated cost of \$257,000;

"Huron Harbor, Ohio: House Document Numbered 165, Eighty-seventh Congress, at an estimated cost of \$8,557,000;

"Cleveland Harbor, Ohio: House Document Numbered 527, Eighty-seventh Congress, at an estimated cost of \$888,000;

"Conneaut Harbor, Ohio: House Document Numbered 415, Eighty-seventh Congress, at an estimated cost of \$6,179,000;

"Erie Harbor, Pennsylvania: House Document Numbered 340, Eighty-seventh Congress, at an estimated cost of \$671,000;

"Buffalo Harbor, New York: House Document Numbered 451, Eighty-seventh Congress, at an estimated cost of \$2,797,000;

"Great Sodus Bay Harbor, New York: House Document Numbered 138, Eighty-seventh Congress, at an estimated cost of \$765,000;

"Oswego Harbor, New York: House Document Numbered 471, Eighty-seventh Congress, at an estimated cost of \$1,180,000;

"Dana Point Harbor, California: House Document Numbered 532, Eighty-seventh Congress, at an estimated cost of \$3,730,000;

"Santa Barbara Harbor, California: House Document Numbered 518, Eighty-seventh Congress, at an estimated cost of \$3,000,000;

"Oakland Harbor, California, Fruitvale Avenue Bridge: Senate Document Numbered 75, Eighty-seventh Congress, at an estimated cost of \$1,750,000;

"Oakland Harbor, California: House Document Numbered 353, Eighty-seventh Congress, at an estimated cost of \$6,775,000;

"Noyo River and Harbor, California: Senate Document Numbered 121, Eighty-seventh Congress, at an estimated cost of \$13,231,000;

"Columbia and Lower Willamette Rivers, Oregon and Washington: House Document Numbered 203, Eighty-seventh Congress, at an estimated cost of \$493,000;

"Columbia and Lower Willamette Rivers below Vancouver, Washington, and Portland, Oregon: House Document Numbered 452, Eighty-seventh Congress, at an estimated cost of \$20,100,000;

"Tacoma Harbor, Port Industrial and Hylebos Waterways, Washington: Senate Document Numbered 104, Eighty-seventh Congress, at an estimated cost of \$2,460,000;

"Kingston Harbor, Washington: House Document Numbered 417, Eighty-seventh Congress, at an estimated cost of \$428,000;

"Swinomish Channel, Washington: House Document Numbered 499, Eighty-seventh Congress, at an estimated cost of \$887,000;

"Kaunakakai Harbor, Molokai, Hawaii: House Document Numbered 484, Eighty-seventh Congress, at an estimated cost of \$7,919,000;

"The project for Hilo Harbor, Hawaii, authorized by Public Law 645, Eighty-sixth Congress, is hereby modified to provide for adjustment of the cash contribution required of local interest in accordance with recommendations by the Secretary of the Army and approved by the President, such adjustment to be made at the earliest practicable date.

#### "Beach erosion

"State of New Hampshire: House Document Numbered 416, Eighty-seventh Congress, at an estimated cost of \$88,000;

"Fire Island Inlet and shore westerly to Jones Inlet, Long Island, New York: Modification of the existing beach erosion control project authorized by the River and Harbor Act of 1958 (Public Law 500, Eighty-fifth Congress), House Document Numbered 411, Eighty-fifth Congress, is hereby authorized substantially in accordance with the plans, which will include a sand bypassing system at Fire Island Inlet, being prepared by the Chief of Engineers, subject to the approval of such plans by the Secretary of the Army and the President;

"Clark Point, New Bedford, Massachusetts: House Document Numbered 584, Eighty-seventh Congress, at an estimated cost of \$60,000;

"Virginia Beach, Virginia: House Document Numbered 382, Eighty-seventh Congress, periodic nourishment;

"Fort Macon, Atlantic Beach and vicinity, North Carolina: House Document Numbered 555, Eighty-seventh Congress, at an estimated cost of \$194,000;

"Palm Beach County from Martin County line to Lake Worth Inlet and from South Lake Worth Inlet to Broward County line, Florida: House Document Numbered 164, Eighty-seventh Congress, at an estimated cost of \$128,800;

"Virginia Key and Key Biscayne, Florida: House Document Numbered 561, Eighty-seventh Congress, at an estimated cost of \$220,000;

"San Juan and vicinity, Puerto Rico: House Document Numbered 575, Eighty-seventh Congress, at an estimated cost of \$65,400;

"Lake Erie shoreline from the Michigan-Ohio State line to Marblehead, Ohio: House Document Numbered 63, Eighty-seventh Congress, at an estimated cost of \$658,500;

"Sheffield Lake community park, Sheffield Lake Village, Ohio: House Document Numbered 414, Eighty-seventh Congress, at an estimated cost of \$100,300;

"Ventura-Pierpont area, California: House Document Numbered 458, Eighty-seventh Congress, at an estimated cost of \$515,000.

"Orange County, California: House Document Numbered 602, Eighty-seventh Congress, at an estimated cost of \$2,845,000.

"SEC. 102. That the Secretary of the Army is hereby authorized to reimburse local interests for such work done by them on the beach erosion projects authorized in section 101, and in other sections of this Act, subsequent to the initiation of the cooperative studies which form the basis for the projects: *Provided*, That the work which may have been done on these projects is approved by the Chief of Engineers as being in accordance with the projects herein adopted: *Provided further*, That such reimbursement shall be subject to appropriations applicable thereto or funds available therefor and shall not take precedence over other pending projects of higher priority for improvements.

"SEC. 103. (a) The Act approved August 13, 1946, as amended by the Act approved July 28, 1956 (33 U.S.C. 426e-h), pertaining to shore protection, is hereby further amended as follows:

"(1) the word 'one-third' in section 1(b) is deleted and the word 'one-half' is substituted therefor;

"(2) the following is added after the word 'located' in section 1(b): ', except that the costs allocated to the restoration and protection of Federal property shall be borne fully by the Federal Government, and, further, that Federal participation in the cost of a project for restoration and protection of State, county, and other publicly owned shore parks and conservation areas may be, in the

discretion of the Chief of Engineers, not more than 70 per centum of the total cost exclusive of land costs, when such areas: Include a zone which excludes permanent human habitation; include but are not limited to recreational beaches; satisfy adequate criteria for conservation and development of the natural resources of the environment; extend landward a sufficient distance to include, where appropriate, protective dunes, bluffs, or other natural features which serve to protect the uplands from damage; and provide essentially full park facilities for appropriate public use, all of which shall meet with the approval of the Chief of Engineers';

"(3) the following is added after the word 'supplemented' in section 1(e): ', or, in the case of a small project under section 3 of this Act, unless the plan therefor has been approved by the Chief of Engineers'; and

"(4) sections 2 and 3 are amended to read as follows:

"SEC. 2. The Secretary of the Army is hereby authorized to reimburse local interests for work done by them, after initiation of the survey studies which form the basis for the project, on authorized projects which individually do not exceed \$1,000,000 in total cost: *Provided*, That the work which may have been done on the projects is approved by the Chief of Engineers as being in accordance with the authorized projects: *Provided further*, That such reimbursement shall be subject to appropriations applicable thereto or funds available therefor and shall not take precedence over other pending projects of higher priority for improvements.

"SEC. 3. The Secretary of the Army is hereby authorized to undertake construction of small shore and beach restoration and protection projects not specifically authorized by Congress, which otherwise comply with section 1 of this Act, when he finds that such work is advisable, and he is further authorized to allot from any appropriations hereafter made for civil works, not to exceed \$3,000,000 for any one fiscal year for the Federal share of the costs of construction of such projects: *Provided*, That not more than \$400,000 shall be allotted for this purpose for any single project and the total amount allotted shall be sufficient to complete the Federal participation in the project under this section including periodic nourishment as provided for under section 1(c) of this Act: *Provided further*, That the provisions of local cooperation specified in section 1 of this Act shall apply: *And provided further*, That the work shall be complete in itself and shall not commit the United States to any additional improvement to insure its successful operation, except for participation in periodic beach nourishment in accordance with section 1(c) of this Act, and as may result from the normal procedure applying to projects authorized after submission of survey reports.

"(b) All provisions of existing law relating to surveys of rivers and harbors shall apply to surveys relating to shore protection and section 2 of the River and Harbor Act approved July 3, 1930, as amended (33 U.S.C. 426), is modified to the extent inconsistent herewith.

"(c) The cost-sharing provisions of this Act shall apply in determining the amounts of Federal participation in or payments toward the costs of authorized projects which have not been substantially completed prior to the date of approval of this Act, and the Chief of Engineers, through the Beach Erosion Board, is authorized and directed to recompute the amounts of Federal contribution toward the costs of such projects accordingly.

"SEC. 104. The project for aquatic plant control authorized by the River and Harbor Act of 1958 (72 Stat. 297, 300) is hereby



modified to provide that research costs and planning costs prior to construction shall be borne fully by the United States and shall not be included in the cost to be shared by local interests.

"Sec. 105. The Secretary of the Army is authorized to convey 17.94 acres of land located at old lock and dam numbered 7, Ohio River, to the city of Midland, Pennsylvania, after November 1, 1962, for public park and recreation purposes, without monetary consideration but subject to reversion to the United States if not utilized for public park and recreation purposes and further subject to such flowage rights as may be necessary in the operation of the New Cumberland lock and dam, Ohio River.

"Sec. 106. Section 110(f) of the River and Harbor Act of 1958 (72 Stat. 297) is amended by changing the period to a comma and adding the following: 'and upon completion of transfer to the said State of all right, title, and interest of the United States in and to the canal in accordance with the agreement executed December 14, 1960, between the Chief of Engineers and the representatives of said State, the additional sum of \$800,000 is hereby authorized to be appropriated to be expended by the Corps of Engineers, or by said State, for the repair and modification of any canal properties and appurtenances, notwithstanding the provisions of section 110(b) hereof.'

"Sec. 107. The Secretary of the Army is authorized and directed to prepare and transmit to Congress, at the earliest practicable date, a compilation of survey and review reports on river and harbor and flood control improvements, similar to that prepared in accordance with the Act of March 4, 1913, revised in accordance with the Acts of July 3, 1930, August 30, 1935, and May 17, 1950, and printed in House Document Numbered 214, Eighty-second Congress, first session.

"Sec. 108. The Chief of Engineers is authorized to perform such work as may be necessary to provide for the repair and restoration of lock and dam numbered 3 on the Big Sandy River: *Provided*, That the work authorized herein shall have no effect on the condition that local interests shall operate and maintain the structure and related properties as required by the Act of Congress approved August 6, 1956 (70 Stat. 1062): *And provided further*, That there is hereby authorized to be expended from appropriations hereafter made for civil functions administered by the Department of the Army, such funds as may be necessary for the repair and restoration of lock and dam numbered 3 on the Big Sandy River, not to exceed \$200,000.

"Sec. 109. The body of water designated as the Redondo Beach Harbor, California, shall be known and designated hereafter as the Redondo Beach King Harbor, California. Any law, regulation, map, document, record, or other paper of the United States in which such body of water is referred to shall be held to refer to it as the Redondo Beach King Harbor, California.

"Sec. 110. The Secretary of the Army is hereby authorized and directed to cause surveys to be made at the following named localities and subject to all applicable provisions of section 110 of the River and Harbor Act of 1950:

"Falmouth Harbor, Maine.

"Channel between Point Shirley and Deer Island, Massachusetts.

"Little Egg Inlet, New Jersey.

"Brigantine Inlet, New Jersey.

"Corsons Inlet, New Jersey.

"Kings Bay Deepwater Channel, Georgia.

"Auglaize River at Wapakoneta, Ohio.

"Surveys of the coastal areas of the United States and its possessions, including the shores of the Great Lakes, in the interest of beach erosion control, hurricane protection

and related purposes: *Provided*, That surveys of particular areas shall be authorized by appropriate resolutions of either the Committee on Public Works of the United States Senate or the Committee on Public Works of the House of Representatives.

"Sec. 111. Title I of this Act may be cited as the 'River and Harbor Act of 1962'.

#### "TITLE II—FLOOD CONTROL

"Sec. 201. Section 3 of the Act approved June 22, 1936 (Public Law Numbered 738, Seventy-fourth Congress), as amended by section 2 of the Act approved June 28, 1938 (Public Law Numbered 761, Seventy-fifth Congress), shall apply to all works authorized in this title except that for any channel improvement or channel rectification project, provisions (a), (b), and (c) of section 3 of said Act of June 22, 1936, shall apply thereto, and except as otherwise provided by law: *Provided*, That the authorization for any flood control project herein adopted requiring local cooperation shall expire five years from the date on which local interests are notified in writing by the Department of the Army of the requirements of local cooperation, unless said interests shall within said time furnish assurances satisfactory to the Secretary of the Army that the required cooperation will be furnished.

"Sec. 202. The provisions of section 1 of the Act of December 22, 1944 (Public Law Numbered 534, Seventy-eighth Congress, second session), shall govern with respect to projects authorized in this Act, and the procedures therein set forth with respect to plans, proposals, or reports for works of improvement for navigation or flood control and for irrigation and purposes incidental thereto shall apply as if herein set forth in full.

"Sec. 203. The following works of improvement for the benefit of navigation and the control of destructive floodwaters and other purposes are hereby adopted and authorized to be prosecuted under the direction of the Secretary of the Army and the supervision of the Chief of Engineers in accordance with the plans in the respective reports hereinafter designated and subject to the conditions set forth therein: *Provided*, That the necessary plans, specifications, and preliminary work may be prosecuted on any project authorized in this title with funds from appropriations hereafter made for flood control so as to be ready for rapid inauguration of a construction program: *Provided further*, That the projects authorized herein shall be initiated as expeditiously and prosecuted as vigorously as may be consistent with budgetary requirements: *And provided further*, That penstocks and other similar facilities adapted to possible future use in the development of hydroelectric power shall be installed in any dam authorized in this Act for construction by the Department of the Army when approved by the Secretary of the Army on the recommendation of the Chief of Engineers and the Federal Power Commission.

#### "New England-Atlantic coastal area

"The project for hurricane-flood protection at Wareham-Marion, Massachusetts, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 548, Eighty-seventh Congress, at an estimated cost of \$3,811,500.

"The project for navigation and hurricane-flood protection at Point Judith, Rhode Island, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 521, Eighty-seventh Congress, at an estimated cost of \$2,414,000.

"The project for navigation and hurricane-flood control protection at Narragansett Pier, Rhode Island, is hereby authorized substantially in accordance with the recommenda-

tions of the Chief of Engineers in House Document Numbered 195, Eighty-seventh Congress, at an estimated cost of \$1,152,000.

#### "Long Island Sound area

"The project for hurricane-flood control protection at New London, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 478, Eighty-seventh Congress, at an estimated cost of \$2,401,000.

"The project for hurricane-flood protection at Westport, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 412, Eighty-seventh Congress, at an estimated cost of \$217,000.

"The project for hurricane-flood protection at Mystic, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 411, Eighty-seventh Congress, at an estimated cost of \$1,490,000.

#### "Housatonic River Basin

"The project for flood protection on the Naugatuck River at Ansonia-Derby, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 437, Eighty-seventh Congress, at an estimated cost of \$5,620,000.

#### "Hudson River Basin

"The project for flood protection on Rondout Creek and Wallkill River and their tributaries, New York and New Jersey, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 113, Eighty-seventh Congress, at an estimated cost of \$5,111,000.

#### "New Jersey-Atlantic coastal area

"The project for hurricane-flood protection and beach erosion control on Raritan Bay and Sandy Hook Bay, New Jersey, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 464, Eighty-seventh Congress, at an estimated cost of \$3,097,000.

#### "Susquehanna River Basin

"The project for construction of the Fall Brook and Ayleworth Creek Reservoirs, and local flood protection works on the Lackawanna River at Scranton, Pennsylvania, is hereby authorized substantially as recommended by the Chief of Engineers, in Senate Document Numbered 141, Eighty-seventh Congress, at an estimated cost of \$3,596,000.

"The project for the Juniata River and tributaries, Pennsylvania, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 565, Eighty-seventh Congress, at an estimated cost of \$32,150,000: *Provided*, That installation of the power generating facilities shall not be made until the Chief of Engineers shall submit a reexamination report to the Congress for authorization.

#### "Delaware River Basin

"The project for the comprehensive development of the Delaware River Basin, New York, New Jersey, Pennsylvania, and Delaware, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers, in House Document Numbered 522, Eighty-seventh Congress, at an estimated cost of \$192,400,000.

#### "Potomac River Basin

"The project for the North Branch of the Potomac River, Maryland and West Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers, in House Document Numbered



469, Eighty-seventh Congress, at an estimated cost of \$50,965,000.

*"Middle Atlantic coastal area"*

"The project for hurricane-flood protection at Norfolk, Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 354, Eighty-seventh Congress, at an estimated cost of \$1,537,000.

"The project for hurricane-flood protection and beach erosion control at Wrightsville Beach, North Carolina, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 511, Eighty-seventh Congress, at an estimated cost of \$345,000.

"The project for hurricane-flood protection and beach erosion control at Carolina Beach and vicinity, North Carolina, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 418, Eighty-seventh Congress, at an estimated cost of \$739,000.

*"Apalachicola River Basin, Georgia"*

"The project for the West Point Reservoir, Chattahoochee River, Georgia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 570, Eighty-seventh Congress, at an estimated cost of \$52,900,000.

*"Central and southern Florida"*

"The comprehensive plan for flood control and other purposes in central and southern Florida approved in the Act of June 30, 1948, and subsequent Acts of Congress, is hereby modified to include the following items:

"The project for flood protection of West Palm Beach Canal is hereby authorized substantially as recommended by the Secretary of the Army and the Chief of Engineers in Senate Document Numbered 146, Eighty-seventh Congress, at an estimated cost of \$3,220,000.

"The project for flood protection on Boggy Creek, Florida, is hereby authorized substantially as recommended by the Chief of Engineers in Senate Document Numbered 125, Eighty-seventh Congress, at an estimated cost of \$1,176,000.

"The project for South Dade County, Florida, is hereby authorized substantially in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers in Senate Document Numbered 138, Eighty-seventh Congress, at an estimated cost of \$13,388,000.

"The project for Shingle Creek, Florida, between Clear Lake and Lake Tohopekaliga, for flood control and major drainage is hereby authorized substantially as recommended by the Chief of Engineers in Senate Document Numbered 139, Eighty-seventh Congress, at an estimated cost of \$3,250,000: *Provided*, That no obligation shall be incurred for development of the Reedy Creek Swamp as a wildlife management area unless the State or one or more other non-Federal entities shall have entered into an agreement in advance to assume at least 50 per centum of the cost associated with that feature of the project.

"The project for flood protection in the Cutler drain area, Florida, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 123, Eighty-seventh Congress, at an estimated cost of \$2,063,000: *Provided*, That local interests shall receive credit in the Contributed Fund Account of the project for moneys shown to have been spent after March 1, 1960, for construction of units of the authorized plan for Cutler Drain: *Provided further*, That such completed work must be inspected and accepted by the Chief of Engineers as consti-

tuting useful parts of the authorized plan: *And provided further*, That the credit established shall be in accordance with cost sharing arrangements for the central and southern Florida flood control project in an amount not to exceed \$124,000.

*"Green Swamp region, Florida"*

"The project for the Four River Basin, Florida, namely the Hillsborough, Oklawaha, Withlacoochee, and Peace Rivers, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 585, Eighty-seventh Congress, at an estimated cost of \$57,760,000: *Provided*, That the cost sharing shall be as recommended by the Secretary of the Army in House Document Numbered 585, Eighty-seventh Congress: *And provided further*, That planning and construction on the Lowery-Mattie Conservation Area and its appurtenant works is deferred until additional studies are made thereon, and a further report submitted to the Congress.

*"Pascagoula River Basin"*

"The project for flood protection on the Chunky Creek, Chickasawhay and Pascagoula Rivers, Mississippi, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 549, Eighty-seventh Congress, at an estimated cost of \$6,740,000.

*"Lower Mississippi River Basin"*

"The project for flood control and improvement of the lower Mississippi River adopted by the Act approved May 15, 1928, as amended by subsequent Acts, is hereby modified and expanded to include the following item:

"(a) Monetary authorizations heretofore and hereafter made available to the project or any portion thereof shall be combined into a single sum and be available for application to any portion of the project.

"The project for flood control and improvement of the lower Mississippi River, adopted by the Act of May 15, 1928, as amended, is hereby modified and expanded to include construction of certain improvements in Gin and Muddy Bayous, Yazoo River Basin, Mississippi, substantially in accordance with plans on file in the Office, Chief of Engineers, subject to the approval of such plans by the Secretary of the Army and the President, at an estimated cost of \$150,000.

"The project for hurricane-flood protection on the Mississippi River Delta at and below New Orleans, Louisiana, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 550, Eighty-seventh Congress, at an estimated cost of \$7,502,000.

"The project for flood protection on Red River in Natchitoches and Red River Parishes, Louisiana, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 476, Eighty-seventh Congress, at an estimated cost of \$1,293,000.

"The lower auxiliary channel, Yazoo River Basin, Mississippi, a unit in the Mississippi River and tributaries project, shall hereafter be known and designated as the Will M. Whittington Auxiliary Channel in honor of the late Member of the House of Representatives from the Third District of Mississippi, and former chairman of the House Public Works Committee. The Secretary of the Army, acting through the Chief of Engineers, United States Army, is hereby authorized and directed to erect appropriate markers along the auxiliary channel designating the project "The Will M. Whittington Auxiliary Channel". Any law, regulation, document, or record of the United States in which such project is designated or referred to under the name of lower auxiliary channel, Yazoo River Basin, Mississippi, shall be held

and considered to refer to such project by the name of "Will M. Whittington Auxiliary Channel".

*"Buffalo Bayou"*

"The project for flood protection on Vince and Little Vince Bayous, Texas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 441, Eighty-seventh Congress, at an estimated cost of \$2,224,000.

*"Gulf of Mexico"*

"The project for hurricane-flood protection at Port Arthur and vicinity, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 505, Eighty-seventh Congress, at an estimated cost of \$23,380,000.

"The project for hurricane-flood protection at Freeport and vicinity, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 495, Eighty-seventh Congress, at an estimated cost of \$3,780,000.

*"Trinity River Basin"*

"The project for flood protection on the East Fork of the Trinity River, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 554, Eighty-seventh Congress, at an estimated cost of \$23,760,000.

"The project for extension of the Fort Worth Floodway, Texas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 454, Eighty-seventh Congress, at an estimated cost of \$5,148,000.

*"Brazos River Basin"*

"The project for the San Gabriel River, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 591, Eighty-seventh Congress, at an estimated cost of \$20,250,000.

"The project for flood protection on the Clear Fork of the Brazos River at and in the vicinity of Abilene, Texas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 506, Eighty-seventh Congress, at an estimated cost of \$31,200,000.

*"Tularosa Basin"*

"The project for flood protection at Alamogordo, New Mexico, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 473, Eighty-seventh Congress, at an estimated cost of \$2,040,000.

*"Rio Grande Basin"*

"The project for flood protection at Las Cruces, New Mexico, is hereby authorized substantially as recommended by the Chief of Engineers in Senate Document Numbered 117, Eighty-seventh Congress, at an estimated cost of \$3,350,000.

*"Arkansas River Basin"*

"The Dardanelle lock and dam, Arkansas River, Arkansas, is hereby modified to provide for construction of a sewage outfall system for the city of Russellville, Arkansas, substantially in accordance with plans of said city, approved by the Chief of Engineers, at an estimated cost of \$1,400,000.

"The Secretary of the Army is hereby authorized and directed to cause an immediate study to be made under the direction of the Chief of Engineers of bank erosion on the Arkansas River between about river mile 455, near Muskogee, Oklahoma, and about river mile 495, near Coweta, Oklahoma. Such project or projects, because of its or their emergency nature, are hereby authorized as determined to be feasible and justified by the Chief of Engineers and Secretary of the Army with the approval of the President un-



less within the first period of sixty calendar days of continuous session of the Congress after the date on which the report is submitted to it such report is disapproved by the Congress: *Provided*, That the requirements for cooperation shall include provisions that local interests shall furnish all lands, easements, and rights-of-way; hold and save the United States free from damages; maintain and operate after completion; and make a cash contribution in recognition of any special benefits: *And provided further*, That with respect to any work found justified in the vicinity of Wybark, Oklahoma, local interests shall meet the requirements as stated and shall make a cash contribution of not less than \$150,000 which shall include the value of all lands, easements, and rights-of-way required to be furnished, and the value of goods and services provided for purposes of project installation on a basis acceptable to the Chief of Engineers: *Provided*, That the cost to the Federal Government shall not exceed \$2,000,000.

"The project for improvement of the Verdigris River and tributaries, Oklahoma and Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 563, Eighty-seventh Congress, at an estimated cost of \$62,400,000.

"The project for flood protection on Big Hill Creek, Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 577, Eighty-seventh Congress, at an estimated cost of \$3,785,000.

"The project for the Kaw Reservoir, Arkansas River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 143, Eighty-seventh Congress, at an estimated cost of \$83,230,000: *Provided*, That nothing in this Act shall be construed as authorizing the acquisition of additional lands for establishment of a national wildlife refuge at the reservoir.

"The project for flood protection on Cow Creek, Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 531, Eighty-seventh Congress, at an estimated cost of \$1,560,000.

"The project for flood protection on the Arkansas River at Dodge City, Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 498, Eighty-seventh Congress, at an estimated cost of \$2,133,000.

#### "White River Basin

"The flood protection project for Village Creek, Jackson and Lawrence Counties, Arkansas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 352, Eighty-seventh Congress, at an estimated cost of \$1,968,000.

"The project for flood protection on Village Creek, White River, and Mayberry Levee Districts, Arkansas is hereby modified to provide for construction of a pumping plant, substantially as recommended by the Chief of Engineers in House Document Numbered 577, Eighty-seventh Congress, at an estimated additional cost of \$1,018,000.

#### "Red River Basin

"That the general plan for flood control and other purposes on Red River below Denison Dam is hereby modified to authorize the Chief of Engineers to adjust the local cooperation requirements of the McKinney Bayou, Arkansas and Texas, Maniece Bayou, Arkansas, and East Point, Louisiana, projects so as to bring such requirements in accord with the recommendations of the Secretary of the Army and approval of the President, such adjustment to be made at the earliest practicable date.

The project for Sanders, Big Pine, and Collier Creeks, Texas, is hereby authorized substantially as recommended by the Chief of Engineers, at an estimated cost of \$16,100,000, subject to the recommendations of the Secretary of the Army and approval of the President.

"The project for Lake Kemp, Wichita River, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 144, Eighty-seventh Congress, at an estimated cost of \$6,410,000.

"The modification of the Broken Bow Reservoir, Mountain Fork River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 137, Eighty-seventh Congress, at an estimated cost of \$23,800,000.

"The project for the Clayton and Tuska-home Reservoirs, Kiamichi River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 145, Eighty-seventh Congress, at an estimated cost of \$29,748,000.

"The project providing for the construction of two experimental water quality study projects in the Arkansas-Red River Basins, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 105, Eighty-seventh Congress, at an estimated cost of \$300,000.

#### "Missouri River Basin

"(a) The Kaysinger Bluff Reservoir, Osage River, Missouri, is hereby modified substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 578, Eighty-seventh Congress, at an estimated additional cost of \$43,245,000: *Provided*, That nothing in this Act shall be construed as authorizing the acquisition of additional lands for the establishment of a national wildlife refuge at the reservoir.

"(b) The project for the Kansas River, Kansas, Nebraska, and Colorado, is hereby authorized substantially in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers in Senate Document Numbered 122, Eighty-seventh Congress, at an estimated cost of \$88,070,000: *Provided*, That the authorization for the Woodbine Reservoir on Lyons Creek is deferred at this time, subject to submission of a new feasibility report to the Eighty-eighth Congress, which shall take into account the water and related land resource development plans of the Soil Conservation Service, the Kansas Water Resources Board, and Lyons Creek Watershed Joint District Numbered 41, and preparation of said report is hereby authorized.

"The project for flood protection on White Clay Creek at Atchison, Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 151, Eighty-seventh Congress, at an estimated cost of \$3,495,000.

"The project for flood protection on Papillon Creek and tributaries, Nebraska, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 475, Eighty-seventh Congress, at an estimated cost of \$2,122,000.

"The project for flood protection on Indian Creek, Iowa, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 438, Eighty-seventh Congress, at an estimated cost of \$1,270,000.

"The project for Grand River and tributaries, North and South Dakota, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 574,

Eighty-seventh Congress, at an estimated cost of \$2,670,000: *Provided*, That the project shall be constructed, operated, and maintained by the Chief of Engineers under the direction of the Secretary of the Army.

"The requirements of local cooperation on the project for flood control on the Floyd River, Iowa, authorized by Public Law 85-500, as recommended by the Chief of Engineers in House Document Numbered 417, Eighty-fourth Congress, is hereby modified to read as follows: "*Provided*, That responsible local interests give assurances satisfactory to the Secretary of the Army that they will (a) furnish without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project; (b) hold and save the United States free from damages due to the construction works; (c) make without cost to the United States all necessary road, highway, highway bridges other than those required to carry Interstate Highway 29 over the relocated Floyd River, and utility alterations and additions; (d) contribute in cash 0.84 per centum of the estimated first cost of the work for which the United States would be responsible, a contribution presently estimated at \$65,000; (e) upon authorization of the project, to take all possible action under Iowa law, short of actual purchase, to prevent additional developments within the right-of-way that might increase the overall cost of the project; and (f) maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army."

#### "Ohio River Basin

"The project for flood protection on the Kokosing River, Ohio, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 220, Eighty-seventh Congress, at an estimated cost of \$2,438,000.

"The project for flood protection on the Wabash River at and in the vicinity of Mount Carmel, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 573, Eighty-seventh Congress, at an estimated cost of \$1,417,000.

"The project for flood protection on the Mad River above Huffman Dam, Ohio, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 439, Eighty-seventh Congress, at an estimated cost of \$7,930,000.

"The project for the Kentucky River, Kentucky, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 423, Eighty-seventh Congress, at an estimated cost of \$26,020,000.

"The project for Twelvepole Creek, West Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 520, Eighty-seventh Congress, at an estimated cost of \$11,000,000.

The project for the Guyandot River and tributaries, West Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 569, Eighty-seventh Congress, second session, at an estimated cost of \$60,477,000.

"The project for flood protection on the Buckhannon River, West Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 43, Eighty-seventh Congress, at an estimated cost of \$1,206,000.

"The project for flood protection on Crab Creek at Youngstown, Ohio, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 440, Eighty-



seventh Congress, at an estimated cost of \$2,268,000.

"The project for the Scioto River, Ohio, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 587, Eighty-seventh Congress, at an estimated cost of \$55,307,000: *Provided*, That nothing in this Act shall be construed as authorizing the acquisition of additional lands for the establishment of a wildlife refuge in this project.

"The project for flood protection on the Allegheny River at Salamanca, New York, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 166, Eighty-seventh Congress, at an estimated cost of \$1,390,000.

"The project for French Creek, Pennsylvania, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 95, Eighty-seventh Congress, at an estimated cost of \$23,102,000.

"The project for the Saline River and tributaries, Illinois, authorized by the Flood Control Act of 1958 (Public Law 85-500) is hereby modified to authorize the Chief of Engineers to adjust the cash contribution required of local interests to such amount as is recommended by the Secretary of the Army and approved by the President, such adjustment to be made at the earliest practicable date.

#### "Upper Mississippi River Basin

"The project for the Illinois River and tributaries, Illinois, Wisconsin, and Indiana, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 472, Eighty-seventh Congress, at an estimated cost of \$71,465,000.

"The project for Rend Lake, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 541, Eighty-seventh Congress, at an estimated cost of \$35,500,000.

"The project for flood protection on the Mississippi River at and in the vicinity of Guttenberg, Iowa, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 286, Eighty-seventh Congress, at an estimated cost of \$729,000.

"The project for flood protection on the Mississippi River between Sainte Genevieve and Saint Marys, Missouri, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 519, Eighty-seventh Congress, at an estimated cost of \$2,500,000.

"The project for the Harrisonville and Ivy Landing Drainage and Levee District Numbered 2, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 542, Eighty-seventh Congress, at an estimated cost of \$1,112,000.

"The project for the Columbia Drainage and Levee District Numbered 3, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 543, Eighty-seventh Congress, at an estimated cost of \$986,000.

"The project for the Prairie DuPont Levee and Sanitary District, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 540, Eighty-seventh Congress, at an estimated cost of \$921,000.

"The project for flood protection on Richland Creek, Illinois, is hereby authorized substantially in accordance with the rec-

ommendations of the Chief of Engineers in House Document Numbered 571, Eighty-seventh Congress, at an estimated cost of \$4,995,000.

"The project for the Joanna Reservoir, Salt River, Missouri, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 507, Eighty-seventh Congress, at an estimated cost of \$63,300,000.

"The project for flood protection on the Pecatonica River, Illinois and Wisconsin, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 539, Eighty-seventh Congress, at an estimated cost of \$850,000.

"The project for flood protection on Rock River at Rockford, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 142, Eighty-seventh Congress, at an estimated cost of \$7,228,000.

"The project for the Mississippi River urban areas from Hampton, Illinois, to mile 300, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 564, Eighty-seventh Congress, at an estimated cost of \$9,289,000.

"The project for the Mississippi River urban areas from Hampton, Illinois, to Cassville, Wisconsin, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 450, Eighty-seventh Congress, at an estimated cost of \$5,350,000.

"The project for the Kickapoo River, Wisconsin, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 557, Eighty-seventh Congress, at an estimated cost of \$15,570,000.

"The project for flood protection on the Warroad River and Bull Dog Creek, Minnesota, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 449, Eighty-seventh Congress, at an estimated cost of \$972,000.

#### "Great Lakes Basin

"The project for flood protection on the River Rouge, Michigan, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 148, Eighty-seventh Congress, at an estimated cost of \$8,659,000.

"The project for flood protection on the Sandusky River, Ohio, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 136, Eighty-seventh Congress, at an estimated cost of \$4,300,000.

#### "Gila River Basin

"The project for the Camelsback Reservoir, Gila River, Arizona, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 127, Eighty-seventh Congress, at an estimated cost of \$9,770,000.

"The project for flood protection on the Gila River below Painted Rock Reservoir, Arizona, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 116, Eighty-seventh Congress, at an estimated cost of \$18,255,000.

"The project for flood protection on Pinal Creek, Arizona, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 512, Eighty-seventh Congress, at an estimated cost of \$1,300,000.

#### "Truckee River Basin

The project for flood protection on the Truckee River and tributaries, California and Nevada, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 435, Eighty-seventh Congress, at an estimated cost of \$2,385,000.

#### "San Francisco Bay area

"The project for flood protection on Alameda Creek, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 128, Eighty-seventh Congress, at an estimated cost of \$14,680,000.

"The project for Corte Madera Creek, Marin County, California, is hereby authorized substantially in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers in House Document Numbered 545, Eighty-seventh Congress, at an estimated cost of \$5,534,000: *Provided*, That local interests shall contribute in cash 3 per centum of the Federal construction of the Rose Valley unit with a contribution presently estimated at \$158,000.

#### "San Joaquin River Basin

"The New Melones project, Stanislaus River, California, authorized by the Flood Control Act approved December 22, 1944 (58 Stat. 887), is hereby modified substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 453, Eighty-seventh Congress, at an estimated cost of \$113,717,000: *Provided*, That upon completion of construction of the dam and powerplant by the Corps of Engineers, the project shall become an integral part of the Central Valley project and be operated and maintained by the Secretary of the Interior pursuant to the Federal reclamation laws, except that the flood control operation of the project shall be in accordance with the rules and regulations prescribed by the Secretary of the Army: *Provided further*, That the Stanislaus River Channel, from Goodwin Dam to the San Joaquin River, shall be maintained by the Secretary of the Army to a capacity of at least eight thousand cubic feet per second subject to the condition that responsible local interests agree to maintain private levees and to prevent encroachment on the existing channel and floodway between the levees: *Provided further*, That before initiating any diversion of water from the Stanislaus River Basin in connection with the operation of the Central Valley project, the Secretary of the Interior shall determine the quantity of water required to satisfy all existing and anticipated future needs within that basin and the diversions shall at all times be subordinate to the quantities so determined: *Provided further*, That the Secretary of the Army adopt appropriate measures to insure the preservation and propagation of fish and wildlife in the New Melones project and shall allocate to the preservation and propagation of fish and wildlife, as provided in the Act of August 14, 1946 (60 Stat. 1080), an appropriate share of the cost of constructing the Stanislaus River division and of operating and maintaining the same: *Provided further*, That the Secretary of the Army, in connection with the New Melones project, construct basic public recreation facilities, acquire land necessary for that purpose, the cost of constructing such facilities and acquiring such lands to be nonreimbursable and nonreturnable: *Provided further*, That contracts for the sale and delivery of the additional electric energy available from the Central Valley project power system as a result of the construction of the plants herein authorized and their integration with that system shall be made in accordance with preferences ex-



pressed in the Federal reclamation laws except that a first preference, to the extent as needed and as fixed by the Secretary of the Interior, but not to exceed 25 per centum of such additional energy, shall be given, under reclamation law, to preference customers in Tuolumne and Calaveras Counties, California, for use in that county, who are ready, able, and willing, within twelve months after notice of availability by the Secretary of the Interior, to enter into contracts for the energy and that Tuolumne and Calaveras County preference customers may exercise their option in the same date in each successive fifth year providing written notice of their intention to use the energy is given to the Secretary not less than eighteen months prior to said dates: *And provided further*, That the Secretary of the Army give consideration during the preconstruction planning for the New Melones project to the advisability of including storage for the regulation of streamflow for the purpose of downstream water quality control.

"The Hidden Reservoir, Fresno River, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 37, Eighty-seventh Congress, at an estimated cost of \$14,338,000.

"The Buchanan Reservoir, Chowchilla River, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 98, Eighty-seventh Congress, at an estimated cost of \$13,585,000.

"The project for flood protection on Mormon Slough, Calaveras River, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 576, Eighty-seventh Congress, at an estimated cost of \$1,960,000.

#### "Russian River Basin

"The project for Russian River, Dry Creek, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 547, Eighty-seventh Congress, at an estimated cost of \$42,400,000.

#### "Redwood Creek Basin

"The project for flood protection on Redwood Creek, Humboldt County, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 497, Eighty-seventh Congress, at an estimated cost of \$2,580,000.

#### "Los Angeles River Basin

"In addition to previous authorizations, there is hereby authorized to be appropriated the sum of \$3,700,000 for the prosecution of the comprehensive plan for the Los Angeles River Basin approved in the Act of August 18, 1941, as amended and supplemented by subsequent Acts of Congress.

#### "Rogue River Basin

"The project for the Rogue River, Oregon and California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 566, Eighty-seventh Congress, at an estimated cost of \$106,700,000, subject to the conditions of local cooperation specified in said report: *Provided*, That the project is to be located, constructed, and operated to accomplish the benefits as set forth and described in the report and appendixes: *And provided further*, That in the years of short water supply all water users will share the available water in the same proportions that they would share the total full supply when it is available, and that no further water-use allocations will be made from the authorized storage so as to retain the maximum possible benefits to authorized

uses during the periods of adversity when storage shortages occur.

#### "Columbia River Basin

"The projects and plans for the Columbia River Basin, including the Willamette River Basin, authorized by the Flood Control Act of June 28, 1938, and subsequent Acts of Congress, including the Flood Control Acts of May 17, 1950, September 3, 1954, July 3, 1958, and July 14, 1960, are hereby modified to include the projects listed below for flood control and other purposes in the Columbia River Basin (including the Willamette River Basin) substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 403, Eighty-seventh Congress: *Provided*, That the depth and width of the authorized channel in the Columbia-Snake River barge navigation project shall be established as fourteen feet and two hundred and fifty feet, respectively, at minimum regulated flow.

"Asotin Dam, Snake River, Idaho and Washington;

"Bruces Eddy Dam and Reservoir, North Fork, Clearwater River, Idaho;

"Strube Reregulating Dam and Reservoir, South Fork, McKenzie River, Oregon;

"Gate Creek Dam and Reservoir, Gate Creek, Oregon;

"Fern Ridge Dam and Reservoir modification, Long Tom River, Oregon;

"Cascadia Dam and Reservoir, South Santiam River, Oregon.

"The project for the Ririe Dam and Reservoir, Willow Creek, Idaho, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 562, Eighty-seventh Congress, at an estimated cost of \$7,027,000.

"The project for the Blackfoot Dam and Reservoir, Blackfoot River, Idaho, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 568, Eighty-seventh Congress, at an estimated cost of \$829,000.

#### "Wynoochee River

"The project for the Wynoochee River, Washington, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 601, Eighty-seventh Congress, at an estimated cost of \$40,211,000: *Provided*, That the installation of the power-generating facilities shall not be made until the Chief of Engineers shall submit a re-examination report to the Congress for authorization.

#### "Cook Inlet, Alaska

"The project for Bradley Lake, Cook Inlet, Alaska, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 455, Eighty-seventh Congress, at an estimated cost of \$45,750,000.

"Sec. 204. (a) For the purpose of developing hydroelectric power and to encourage and promote the economic development of and to foster the establishment of essential industries in the State of Alaska, and for other purposes, the Secretary of the Army, acting through the Chief of Engineers, is authorized to construct and the Secretary of the Interior is authorized to operate and maintain the Crater-Long Lakes division of the Snettisham project near Juneau, Alaska. The works of the division shall consist of pressure tunnels, surge tanks, penstocks, a powerplant, transmission facilities, and related facilities, all at an estimated cost of \$41,634,000.

"(b) Electric power and energy generated at the division except that portion required in the operation of the division, shall be disposed of by the Secretary of the Interior in such a manner as to encourage the most

widespread use thereof at the lowest possible rates to consumers consistent with sound business principles. Rate schedules shall be drawn having regard to the recovery of the costs of producing and transmitting the power and energy, including the amortization of the capital investment over a reasonable period of years, with interest at the average rate (which rate shall be certified by the Secretary of the Treasury) paid by the United States on its marketable long-term securities outstanding on the date of this Act and adjusted to the nearest one-eighth of 1 per centum. In the sale of such power and energy, preference shall be given to Federal agencies, public bodies, and cooperatives. It shall be a condition of every contract made under this Act for the sale of power and energy that the purchaser, if it be a purchaser for resale, will deliver power and energy to Federal agencies or facilities thereof within its transmission area at a reasonable charge for the use of its transmission facilities. All receipts from the transmission and sale of electric power and energy generated at said division shall be covered into the Treasury of the United States to the credit of miscellaneous receipts.

"(c) The appropriate Secretary is authorized to perform any and all acts and enter into such agreements as may be appropriate for the purpose of carrying the provisions of this Act into full force and effect, including the acquisition of rights and property, and the Secretary of the Army, when an appropriation shall have been made for the commencement of construction or the Secretary of the Interior in the case of operation and maintenance of said division, may, in connection with the construction or operation and maintenance of such division, enter into contracts for miscellaneous services for materials and supplies, as well as for construction, which may cover such periods of time as the appropriate Secretary may consider necessary but in which the liability of the United States shall be contingent upon appropriations being made therefor.

"Sec. 205. Section 205 of the Flood Control Act of 1948, as amended (33 U.S.C. 701s), is amended (a) by striking out '\$10,000,000' and inserting in lieu thereof '\$25,000,000', (b) by striking out the term 'small flood control projects' and inserting in lieu thereof the term 'small projects for flood control and related purposes', and (c) by striking out '*Provided*, That not more than \$400,000 shall be allotted for this purpose at any single locality from the appropriations for any one fiscal year' and inserting in lieu thereof '*Provided*, That not more than \$1,000,000 shall be allotted under this section for a project at any single locality and the amount allotted shall be sufficient to complete Federal participation in the project'.

"Sec. 206. The first sentence of section 5 of the Flood Control Act approved August 18, 1941, as amended (33 U.S.C. 701n), is hereby further amended to read as follows: 'That there is hereby authorized an emergency fund in the amount of \$15,000,000 to be expended in flood emergency preparation, in flood fighting and rescue operations, or in the repair or restoration of any flood control work threatened or destroyed by flood, including the strengthening, rising, extending, or other modification thereof as may be necessary in the discretion of the Chief of Engineers for the adequate functioning of the work for flood control; in the emergency protection of federally authorized hurricane or shore protection being threatened when in the discretion of the Chief of Engineers such protection is warranted to protect against imminent and substantial loss to life and property; in the repair and restoration of any federally authorized hurricane or shore protective structure damaged or destroyed by wind, wave, or water action of other than an ordinary nature when in the discretion of the



Chief of Engineers such repair and restoration is warranted for the adequate functioning of the structure for hurricane or shore protection.

"Sec. 207. Section 4 of the Act entitled "An Act authorizing the construction of certain public works on rivers and harbors for flood control, and for other purposes", approved December 22, 1944, as amended by section 4 of the Flood Control Act of July 24, 1946, and by section 209 of the Flood Control Act of 1954, is hereby further amended to read as follows:

"Sec. 4. The Chief of Engineers, under the supervision of the Secretary of the Army, is authorized to construct, maintain, and operate public park and recreational facilities at water resource development projects under the control of the Department of the Army, to permit the construction of such facilities by local interests (particularly those to be operated and maintained by such interests), and to permit the maintenance and operation of such facilities by local interests. The Secretary of the Army is also authorized to grant leases of lands, including structures or facilities thereon, at water resource development projects for such periods, and upon such terms and for such purposes as he may deem reasonable in the public interest: *Provided*, That leases to non-profit organizations for park or recreational purposes may be granted at reduced or nominal considerations in recognition of the public service to be rendered in utilizing the leased premises: *Provided further*, That preference shall be given to Federal, State, or local governmental agencies, and licenses or leases where appropriate, may be granted without monetary considerations, to such agencies for the use of all or any portion of a project area for any public purpose, when the Secretary of the Army determines such action to be in the public interest, and for such periods of time and upon such conditions as he may find advisable: *And provided further*, That in any such lease or license to a Federal, State, or local governmental agency which involves lands to be utilized for the development and conservation of fish and wildlife, forests, and other natural resources, the licensee or lessee may be authorized to cut timber and harvest crops as may be necessary to further such beneficial uses and to collect and utilize the proceeds of any sales of timber and crops in the development, conservation, maintenance, and utilization of such lands. Any balance of proceeds not so utilized shall be paid to the United States at such time or times as the Secretary of the Army may determine appropriate. The water areas of all such projects shall be open to public use generally, without charge, for boating, swimming, bathing, fishing, and other recreational purposes, and ready access to and exit from such areas along the shores of such projects shall be maintained for general public use, when such use is determined by the Secretary of the Army not to be contrary to the public interest, all under such rules and regulations as the Secretary of the Army may deem necessary. No use of any area to which this section applies shall be permitted which is inconsistent with the laws for the protection of fish and game of the State in which such area is situated. All moneys received by the United States for leases or privileges shall be deposited in the Treasury of the United States as miscellaneous receipts."

"Sec. 208. Section 207 of the Flood Control Act of 1960 (74 Stat. 501) is hereby amended to read as follows:

"Sec. 207. (a) When used in this section—

"(1) The term "Agency" means the Corps of Engineers, United States Army, or the Bureau of Reclamation, United States Department of the Interior, whichever has jurisdiction over the project concerned.

"(2) The term "head of the Agency concerned" means the Chief of Engineers or the Commissioner, Bureau of Reclamation, or their respective designees.

"(3) The term "water resources projects to be constructed in the future" includes all projects not yet actually under construction, and, to the extent of work remaining to be completed, includes projects presently under construction where road relocations or identifiable components thereof are not complete as of the date of this section.

"(4) The term "time of the taking" is the date of the relocation agreement, the date of the filing of a condemnation proceeding, or a date agreed upon between the parties as the date of taking.

"(b) Whenever, in connection with the construction of any authorized flood control, navigation, irrigation, or multiple-purpose project for the development of water resources, the head of the Agency concerned determines it to be in the public interest to utilize existing public roads as a means of providing access to such projects during construction, such Agency may improve, reconstruct, and maintain such roads and may contract with the local authority having jurisdiction over the roads to accomplish the necessary work. The accomplishment of such work of improvement may be carried out with or without obtaining any interest in the land on which the road is located in accordance with mutual agreement between the parties: *Provided*, (1) That the head of the Agency concerned determines that such work would result in a saving in Federal cost as opposed to the cost of providing a new access road at Federal expense, (2) that, at the completion of construction, the head of the Agency concerned will, if necessary, restore the road to at least as good condition as prior to the beginning of utilization for access during construction, and (3) that, at the completion of construction, the responsibility of the Agency for improvement, reconstruction, and maintenance shall cease.

"(c) For water resources projects to be constructed in the future, when the taking by the Federal Government of an existing public road necessitates replacement, the substitute provided will, as nearly as practicable, serve in the same manner and reasonably as well as the existing road. The head of the Agency concerned is authorized to construct such substitute roads to design standards comparable to those of the State, or, where applicable State standards do not exist, those of the owning political division in which the road is located, for roads of the same classification as the road being replaced. The traffic existing at the time of the taking shall be used in the determination of the classification. In any case where a State or political subdivision thereof requests that such a substitute road be constructed to a higher standard than that provided in the preceding provisions of this subsection, and pays, prior to commencement of such construction, the additional costs involved due to such higher standard, such Agency head is authorized to construct such road to such higher standard. Federal costs under the provisions of this subsection shall be part of the nonreimbursable project costs."

"Sec. 209. The Secretary of the Army is hereby authorized and directed to cause surveys for flood control and allied purposes, including channel and major drainage improvements, and floods aggravated by or due to wind or tidal effects, to be made under the direction of the Chief of Engineers, in drainage areas of the United States and its territorial possessions, which include the following named localities: *Provided*, That after the regular or formal reports made on any survey are submitted to Congress, no supplemental or additional report or estimate shall be made unless authorized by law

except that the Secretary of the Army may cause a review of any examination or survey to be made and a report thereon submitted to Congress, if such review is required by the national defense or by changed physical or economic conditions: *Provided further*, That the Government shall not be deemed to have entered upon any project for the improvement of any waterway or harbor mentioned in this title until the project for the proposed work shall have been adopted by law:

"Valenciana River, Puerto Rico.

"Waccasassa River (Levy County and Gilchrist County), Florida.

"Lake Pontchartrain, North Shore, Louisiana.

"Peytons Creek and tributaries, Texas.

"Clear Creek, Texas.

"San Bernard River, Texas.

"Arkansas River Basin, with reference to the effect of the Eufaula and Keystone Reservoirs, Oklahoma, on the water supply facilities of the cities of McAlester and Yale, respectively, with a view to determining the extent, if any, of Federal participation in the replacement of the cities' water supply facilities in equity without regard to limitation contained in existing Corps of Engineers protective and relocation plans.

"Cumberland River, Kentucky and Tennessee, with reference to the effect of the Barkley Dam project, on the water supply and sewage treatment facilities of the cities of Cadiz, Kuttawa, and Eddyville, Kentucky, and the State penitentiary at Eddyville, Kentucky, respectively, with a view to determining the extent, if any, of Federal participation in the replacement of their water supply and sewage treatment facilities in equity without regard to limitation contained in existing Corps of Engineers protective and relocation plans.

"Missouri River Basin, with reference to the effect of Oahe and Garrison Reservoirs, North Dakota and South Dakota, on the sewage treatment facilities of the cities of Bismarck and Mandan, North Dakota, respectively, with a view to determining the extent, if any, of Federal participation in the sewage treatment facilities in equity without regard to limitation contained in existing Corps of Engineers protective and relocation plans.

"All streams in Santa Barbara County, California, draining the Santa Ynez Mountains, except Santa Ynez River and tributaries.

"Sacramento River Basin and streams in northern California draining into the Pacific Ocean for the purposes of developing, where feasible, multiple-purpose water resource projects, particularly those which would be eligible under the provisions of title III of Public Law 85-500.

"Battle Creek, Sacramento River, California.

"Kaskaskia River levees, Illinois; review of requirements of local cooperation.

"Puget Sound, Washington, and adjacent waters, including tributaries, in the interest of flood control, navigation, and other water uses and related land resources.

"Harbors and rivers in Hawaii, with a view to determining the advisability of improvements in the interest of navigation, flood control, hydroelectric power development, water supply, and other beneficial water uses, and related land resources.

"Waimea River, Kokee Area, Kauai, Hawaii, for multiple purposes.

"Waipio River, Kohala-Hamakua coast, Island of Hawaii, for multiple purpose development.

"Iao River, Wailuku, Maui, Hawaii.

"Sec. 210. The Secretary of the Army acting through the Corps of Engineers is hereby authorized to replace with adequate floodway capacity the bridge over Boeuf River, Chicot County, Arkansas, approximately three miles north of the county line, and the bridge over Big Bayou, Chicot County, Arkansas, approx-



imately two miles upstream from its confluence with the Boeuf River which were altered as part of the project for Boeuf and Tensas Rivers and Bayou Macon, authorized by the Flood Control Act of December 22, 1944, and which were recently destroyed by floods, at an estimated cost of \$115,000.

"SEC. 211. The Wilkesboro Reservoir flood control project, Yadkin River, North Carolina, authorized by the Flood Control Act of 1946, shall hereafter be known and designated as the W. Kerr Scott Dam and Reservoir, in honor of the late Senator W. Kerr Scott of North Carolina. Any law, regulation, document, or record of the United States in which such project is designated or referred to shall be held and considered to refer to such project by the name of the W. Kerr Scott Dam and Reservoir.

"SEC. 212. Title II of this Act may be cited as the 'Flood Control Act of 1962'."

And the Senate agree to same.

CLIFFORD DAVIS,  
JOHN A. BLATNIK,  
ROBERT E. JONES,  
WILLIAM C. CRAMER,  
JOHN F. BALDWIN, JR.,

*Managers on the Part of the House.*

ROBERT S. KERR,  
PAT McNAMARA,  
JENNINGS RANDOLPH,  
JOHN SHERMAN COOPER,  
HIRAM L. FONG,

*Managers on the Part of the Senate.*

#### STATEMENT

The managers on the part of the House at the conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H.R. 13273) authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes, submit the following statement in explanation of the effect of the action agreed upon by the conferees and recommended in the accompanying conference report:

The Senate amendment strikes out all of the House bill after the enacting clause and inserts a substitute. The House recedes from its disagreement to the amendment of the Senate, with an amendment which is a substitute for both the House bill and the Senate amendment. The differences between the Senate amendment and the substitute agreed to in conference are noted in the following outline, except for incidental changes made necessary by reason of agreements reached by the conferees and minor and clarifying changes.

#### TITLE I—RIVERS AND HARBORS

The Senate amendment did not delete any of the projects for navigation contained in the House bill. The Senate amendment did modify certain of these projects and it also authorized projects not contained in the House bill.

(1) The Senate amendment authorized further partial accomplishment of the project for the Great Lakes to Hudson River Waterway, N.Y., at an estimated cost of \$1,000,000 additional.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

(2) The project for Newark Bay, Hackensack and Passaic Rivers, N.J., contained in the House bill was modified by the Senate amendment to require approval of the plans of the Chief of Engineers by both the Secretary of the Army and the President.

The proposed conference substitute is the same as the Senate amendment.

(3) The Senate amendment authorized the project for the James River, Va., at an estimated cost of \$39,000,000, with the condition that the authorization expire after 5 years unless the Governor of Virginia has endorsed the project within that time and a

further requirement that there be submitted to Congress a feasible report which takes account of possible adverse effects of the project on seed oyster production.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

(4) The Senate amendment authorized the project for Canaveral Harbor, Fla., at an estimated cost of \$5,076,000.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

(5) The project for Holt lock and dam, Alabama, as authorized in the House bill, required a report of the Chief of Engineers to be submitted to Congress within the first period of 60 calendar days of continuous session of the 87th Congress. The Senate amendment extended this period of 90 days.

The proposed conference substitute is the same as the House bill.

(6) The Senate amendment authorized the modification of the Mississippi River, Baton Rouge to Gulf of Mexico Barge Channel through Devils Swamp, Louisiana, for dikes and retaining structures, at a Federal cost of \$299,500, with local interests to contribute \$100,500.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

(7) The Senate amendment authorized the project for Bayous Terrebonne, Petit Caillou, Grand Caillou, Du Large, and connecting channels, Louisiana, and Atchafalaya River, Morgan City to Gulf of Mexico, at an estimated cost of \$45,000.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

(8) The project for the Gulf Intracoastal Waterway, Louisiana and Texas, contained in the House bill was modified by the Senate amendment to provide that the authority to make such modifications as the Chief of Engineers deems desirable, as set forth in House Document No. 556, 87th Congress, shall be construed to apply to, but not be limited to, the improvement of the existing channels at proposed channel relocation sites in lieu of such relocations.

The proposed conference substitute is the same as the Senate amendment.

(9) The project for the Calcasieu River salt water barrier, Louisiana, contained in the House bill was modified by the Senate amendment through the inclusion of a proviso requiring a study by the Corps of Engineers of the question of cost sharing and authorizing such cost sharing as is determined feasible and justified by the Chief of Engineers and the Secretary of the Army within the first period of 60 calendar days of Congress after the date on which the report on cost sharing is submitted to the Congress, unless Congress disapproves such report.

The proposed conference substitute is the same as the Senate amendment.

(10) The project for Trinity River, Wallisville Reservoir, Tex., as contained in the House bill was modified by the Senate amendment through the addition of a proviso that nothing in the act shall be construed as authorization for the acquisition of additional lands for the establishment of a national wildlife refuge at the reservoir.

The proposed conference substitute is the same as the Senate amendment.

(11) The project for the Illinois Waterway, Ill. and Ind., was authorized in the House bill at an estimated cost of \$114,652,000. The Senate amendment reduced that figure to \$40,000,000 for initiation and partial accomplishment of the project.

The proposed conference substitute is the same as the Senate amendment.

(12) The Senate amendment modified the project for Hilo Harbor, Hawaii, to provide

for adjustment of the cash contribution required of local interests in accordance with the recommendations by the Secretary of the Army and approved by the President.

The House bill did not contain this provision.

The proposed conference substitute is the same as the Senate amendment, except that the adjustment is required to be made at the earliest practicable date.

#### Beach erosion

The Senate amendment did not delete any of the beach erosion projects which were contained in the House bill.

The Senate amendment did modify certain of these projects, and it also authorized projects not contained in the House bill.

(1) The project for Fire Island Inlet to Jones Inlet, Long Island, N.Y., contained in the House bill was modified by the Senate amendment by requiring that the plans being prepared by the Chief of Engineers be approved by the Secretary of the Army and the President.

The proposed conference substitute is the same as the Senate amendment.

(2) The Senate amendment authorized a project for Clark Point, New Bedford, Mass., at an estimated cost of \$60,000.

This project is not in the House bill.

The proposed conference substitute is the same as the Senate amendment.

(3) The Senate amendment authorized a project for Palm Beach County from Martin County line to Lake Worth Inlet and from South Lake Worth Inlet to Broward County line, Florida, at an estimated cost of \$128,800.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

(4) The Senate amendment authorized a project for San Juan and vicinity, Puerto Rico, at an estimated cost of \$65,400.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

(5) The Senate amendment authorized a project for Orange County, Calif., at an estimated cost of \$2,845,000.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

#### Shore protection modifications

Section 103 of the Senate amendment amended the act of August 13, 1946, which relates to Federal participation in the cost of protecting the shores of publicly owned property by increasing the Federal contribution from one-third to one-half, by requiring that when the property is Federal property all of the cost will be borne by the Federal Government and by requiring that up to 70 percent of the cost exclusive of land costs shall be borne by the Federal Government when it is a project for restoration of State, county, and other publicly owned shore parks and other conservation areas under certain circumstances. It further authorizes the Secretary of the Army to reimburse local interests for work done by them on authorized projects which individually do not exceed \$1,000,000 in total cost after initiation of the survey studies which form the basis for the project, if the work is approved by the Chief of Engineers as being in accordance with the project; however, the reimbursement shall be subject to appropriations applicable thereto or funds available therefor and shall not take precedence over other pending projects of higher priority. It further authorizes the Chief of Engineers to undertake small shore and beach restoration and protection projects not specifically authorized by Congress if he finds it advisable and permits him to spend not to exceed \$3,000,000 in any one fiscal year for such projects, except that not more than \$400,000 shall be allocated to any one project and the total amount allotted shall be enough to complete Federal participation in the project.



Local cooperation is required and the work on the small project must be complete in itself and not commit the United States to any additional improvement to insure its successful operation.

Subsection (b) of section 103 of the Senate amendment provides that all existing law relating to surveys of rivers and harbors shall apply to surveys related to shore protection.

Subsection (c) of section 103 of the Senate amendment provides that the cost sharing provisions of this act shall apply to authorized projects not substantially completed before the date of enactment of this act and directs the Chief of Engineers to recompute Federal contributions to such projects accordingly.

The bill as passed by the House contained no comparable provision.

The proposed conference substitute is the same as the Senate amendment.

#### *Aquatic plant control*

Section 104 of the Senate amendment modifies the project for aquatic plant control authorized by the River and Harbor Act of 1958 to make research costs and planning costs prior to construction entirely borne by the United States.

The House bill contained no such provision.

The proposed conference substitute is the same as the Senate amendment.

#### *Illinois and Mississippi Canal*

Section 106 of the Senate amendment amends section 110(f) of the River and Harbor Act of 1958 to authorize the appropriation of an additional sum of \$800,000 to be expended by the Chief of Engineers or by the State of Illinois for the repair and modification of the Illinois and Mississippi Canal, notwithstanding subsection (b) of such section 110, upon transfer to the State of Illinois of all the right, title, and interest of the United States in and to the canal in accordance with an agreement of December 14, 1960.

The House bill contained no such provision.

The proposed conference substitute is the same as the Senate amendment.

#### *Compilation*

Section 107 of the Senate amendment directed the Secretary of the Army to prepare and transmit to Congress as soon as practicable a compilation of survey and review reports on river and harbor and flood control improvements similar to compilations which have been prepared in the past.

The House bill did not contain this requirement.

The proposed conference substitute is the same as the Senate amendment.

#### *Surveys*

In addition to the surveys authorized in the House bill the Senate amendment authorized the following surveys to be made: Falmouth Harbor, Maine, Little Egg Inlet, N.J., Brigantine Inlet, N.J., and Corsons Inlet, N.J.

The proposed conference substitute is the same as the Senate amendment.

The Senate amendment provided general authorization for surveys of the coastal areas of the United States and its possessions including the shores of the Great Lakes in the interest of beach erosion, hurricane protection, and related purposes with a requirement that surveys of particular areas shall be authorized by resolutions of either the Committee on Public Works of the Senate or of the House.

The House bill contained no such general authorization.

The proposed conference substitute is the same as the Senate amendment.

#### **TITLE II—FLOOD CONTROL**

The Senate amendment contained all of the projects for flood control contained in the House bill. It modified certain of these projects as passed by the House and added certain others. The following projects were either modified or added by the Senate and are contained in the proposed conference substitute:

##### *Susquehanna River Basin*

The Senate amendment authorized an additional \$5,000,000 for the project for the West Branch of the Susquehanna River Basin.

The House bill contained no such project. The proposed conference substitute does not contain this authorization.

The Senate amendment authorized a project for the Fall Brook and Ayleworth Creek Reservoirs on the Lackawanna River at Scranton, Pa., at an estimated cost of \$3,596,000.

The House bill contained no such project. The proposed conference substitute is the same as the Senate amendment.

The project for the Juniata River and tributaries, Pennsylvania, contained in the House bill specifically exempted the power features of such project from authorization and permitted the Chief of Engineers to submit a reexamination report on those features if he deems it desirable.

The Senate amendment did not specifically exempt the power features of the project from authorization but did provide that their installation shall not be made until the Chief of Engineers shall have submitted a reexamination report to Congress.

The proposed conference substitute is the same as the Senate amendment.

##### *Delaware River Basin*

The project for the Delaware River Basin, N.Y., N.J., Pa., and Del., were authorized in the House bill at an estimated cost of \$224,000,000.

The Senate amendment reduced the authorization to \$192,400,000.

The proposed conference substitute is the same as the Senate amendment.

##### *Middle Atlantic coastal area*

The Senate amendment authorized a project for hurricane-flood protection and beach erosion control at Wrightsville Beach, N.C., at an estimated cost of \$345,000.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

##### *Cape Fear River Basin*

The Senate amendment contained a project for Cape Fear River Basin, N.C., at an estimated cost of \$25,143,000.

The House bill contained no such project.

The proposed conference substitute does not contain this authorization.

##### *Apalachicola River Basin, Ga.*

The House bill authorized a project for the West Point Reservoir, Chattahoochee River, Ga., in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers, at an estimated cost of \$52,900,000.

The Senate amendment deleted the "Secretary of the Army and the".

The proposed conference substitute is the same as the Senate amendment.

The Senate amendment authorized a project for Flint River, Ga., at an estimated cost of \$151,820,000, with the proviso that this authorization is without prejudice to consideration by the Federal Power Commission of non-Federal development of power.

The House bill contained no such project.

The proposed conference substitute does not contain this authorization.

##### *Central and southern Florida*

The Senate amendment provided an additional \$30,000,000 basin authorization for central and southern Florida.

The House bill did not contain this authorization.

The proposed conference substitute does not contain this authorization.

##### *West Palm Beach Canal*

The Senate amendment authorized a project for flood protection of West Palm Beach Canal, at an estimated cost of \$3,220,000.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

##### *Boggy Creek, Fla.*

The Senate amendment authorized a project for flood protection on Boggy Creek, Fla., at an estimated cost of \$1,176,000.

The House bill did not contain this project.

The proposed conference substitute is the same as the Senate amendment.

##### *Shingle Creek, Fla.*

The Senate amendment authorized a project for Shingle Creek, Fla., at an estimated cost of \$3,250,000, with the proviso that no obligation shall be incurred for the development of the Reedy Creek Swamp as a wildlife management area unless the State or another non-Federal entity agrees in advance to pay at least half the cost of that feature of the project.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

##### *Cutler drain area, Florida*

The project for the Cutler drain area, Florida, contained in the House bill was modified by the Senate amendment through the inclusion of a proviso that local interests shall receive credit for moneys spent after March 1, 1960, for construction of units of the authorized plan for Cutler drain if that work is acceptable to the Chief of Engineers and if that credit does not exceed \$124,000.

The proposed conference substitute is the same as the Senate amendment, with a clerical amendment.

##### *Green Swamp region, Florida*

The project for the Four River Basins, Fla., authorized by the House bill was modified by the Senate amendment by a proviso that cost sharing shall be as recommended by the Secretary of the Army in House Document No. 585, 87th Congress. The Senate amendment also deferred the planning and construction on the Lowery-Mattie conservation area until a further report is made to Congress.

The proposed conference substitute is the same as the Senate amendment.

##### *Lower Mississippi River Basin*

The Senate amendment modified the project for flood control and improvement of the lower Mississippi River adopted by the act of May 15, 1928, and subsequent acts to provide that monetary authorizations heretofore and hereafter made available to the projects shall be combined into a single sum and shall be available for application to any portion of the project.

The House bill contained no such modification.

The proposed conference substitute is the same as the Senate amendment.

##### *Gin and Muddy Bayous, Yazoo River Basin, Miss.*

The authorization contained in the House bill for improvements in Gin and Muddy Bayous, Yazoo River Basin, Miss., were modified by the Senate amendment to provide that the plans for such improvements



be subject to approval by the Secretary of the Army and the President.

The proposed conference substitute is the same as the Senate amendment.

#### *Brazos River Basin*

The Senate amendment authorized an additional \$21,000,000 for the Brazos River Basin.

The House bill contained no such authorization.

The proposed conference substitute does not contain this authorization.

#### *Arkansas River Basin*

The Senate amendment authorized an additional \$182,000,000 for the Arkansas River Basin.

The House bill contained no such authorization.

The proposed conference substitute does not contain this authorization.

#### *Arkansas River between Muskogee, Okla., and Coweta, Okla.*

The Senate amendment authorized and directed the Secretary of the Army to make a study of bank erosion on the Arkansas River between Muskogee, Okla., and Coweta, Okla., and authorized such projects as the Chief of Engineers, the Secretary of the Army, and the President approved, unless within 60 days after the submission of the report thereon to the Congress such report is disapproved by Congress.

It provided the usual requirements for cooperation by local interests, except that with respect to any work found justified within the vicinity of Wybark, Okla., local interests shall make a cash contribution of not less than \$150,000 which shall include the value of all lands, easements, and rights-of-way required to be furnished, and the value of goods and services provided for purposes of project installation on a basis acceptable to the Chief of Engineers.

The House bill contained no such provision.

The proposed conference substitute is the same as the Senate amendment, except that the language has been modified to make it clear that the advance authorization of the bank erosion projects has been adopted because of their emergency nature. The conference substitute also limits to \$2,000,000 the Federal costs under this authorization.

#### *Big Hill Creek, Kans.*

The Senate amendment authorized the project for flood protection on Big Hill Creek, Kans., at an estimated cost of \$3,785,000.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

#### *Kaw Reservoir, Arkansas River, Okla.*

The project for the Kaw Reservoir, Arkansas River, Oklahoma, authorized by the House bill, was modified by the Senate amendment to include a proviso that nothing in this act shall be construed to authorize the acquisition of additional lands for the establishment of a national wildlife refuge at the reservoir.

The proposed conference substitute is the same as the Senate amendment.

#### *White River Basin*

The Senate amendment authorized an additional \$11,000,000 for the White River Basin.

The House bill contained no such authorization.

The proposed conference substitute does not contain this authorization.

#### *Red River Basin*

The Senate amendment modified the general plan for flood control on the Red River below Denison Dam to permit the Chief of Engineers to adjust local cooperation requirements of the McKinney Bayou, Ark., and Tex., Maniece Bayou, Ark., and East Point,

La., projects to bring them into accord with the recommendations of the Secretary of the Army and the approval of the President.

The House bill contained no such modification.

The proposed conference substitute is the same as the Senate amendment except that the adjustment is required to be made at the earliest practicable date.

The Senate amendment authorized a project for Sanders, Big Pine, and Collier Creeks, Tex., at an estimated cost of \$16,100,000, subject to the recommendation of the Chief of Engineers and Secretary of the Army, and approval by the President.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

#### *Missouri River Basin*

The Senate amendment authorized an additional \$140,000,000 for the Missouri River Basin.

The House bill contained no such additional authorization.

The proposed conference substitute does not contain this authorization.

The Senate amendment authorized the project for flood protection on White Clay Creek, Atchison, Kans., at an estimated cost of \$3,495,000.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

The Senate amendment authorized the project for Grand River and tributaries, North and South Dakota, at an estimated cost of \$2,670,000, with the requirement that the project be constructed, operated and maintained by the Chief of Engineers under the direction of the Secretary of the Army.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

The Senate amendment modified the requirements of local cooperation on the project for flood control on the Floyd River, Iowa, to require that local interests (1) furnish without cost to the United States all necessary lands, easements, and rights-of-way, (2) hold the United States free from damages due to construction, (3) make without cost to the United States all necessary road, highway, highway bridges (other than those required to carry Interstate Highway 29) over the relocated Floyd River, and utility, alterations and additions, (4) contribute in cash 0.84 percent of the estimated first cost of the work (approximately \$65,000), (5) take all possible action to prevent increase of the overall cost of the project, and (6) maintain and operate the completed work in accordance with regulations of the Secretary of the Army.

The House bill did not modify these requirements of local cooperation on this project.

The proposed conference substitute is the same as the Senate amendment.

#### *Ohio River Basin*

The Senate amendment authorized an additional \$120,000,000 for the Ohio River Basin.

The House bill contained no such authorization.

The proposed conference substitute does not contain this authorization.

The Senate amendment authorized the project on the Wabash River near Mount Carmel, Ill., at an estimated cost of \$1,417,000.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

The Senate amendment authorized the project for the big South Fork of the Cumberland River, Ky., and Tenn., at an estimated cost of \$151,000,000.

The House bill contained no such project.

The proposed conference substitute does not contain this authorization.

#### *Scioto River, Ohio*

The House bill authorized the project for the Scioto River, Ohio, substantially in accordance with the recommendations of the Chief of Engineers at an estimated cost of \$55,847,000.

The Senate amendment authorized this project for the Big South Fork of the Cumtums of the Secretary of the Army and the Chief of Engineers at an estimated cost of \$55,307,000 with a proviso that nothing in the act shall be construed to authorize the acquisition of additional lands for the establishment of a wildlife refuge in this project.

The proposed conference substitute follows the House bill with respect to the authorization, follows the Senate amendment limiting the cost to \$55,307,000, and adopts the proviso in the Senate amendment.

#### *Saline River, Ill.*

The House bill modified the project for the Saline River and tributaries, Illinois, to eliminate the requirement that there be a cash contribution by local interests and to provide that other items of local cooperation heretofore recommended by the Chief of Engineers still be applicable.

The Senate amendment modified that project to authorize the Chief of Engineers to adjust the cash contributions required of local interests to such amount as is recommended by the Secretary of the Army and approved by the President.

The proposed conference substitute is the same as the Senate amendment, except that the adjustment is required to be made at the earliest practicable date.

#### *Upper Mississippi River Basin*

The Senate amendment authorized an additional \$31,000,000 for the upper Mississippi River Basin.

The House bill contained no such authorization.

The proposed conference substitute does not contain this authorization.

The Senate amendment authorized a project on the Rock River at Rockford, Ill., at an estimated cost of \$7,228,000.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

The Senate amendment authorized the project for the Mississippi River urban areas from Hampton, Ill., to mile 300 at an estimated cost of \$9,289,000.

The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

#### *Gila River Basin*

The Senate amendment authorized the project for the Camelsback Reservoir, Gila River, Ariz., at an estimated cost of \$9,770,000. It also authorized the project on the Gila River below Painted Rock Reservoir, Ariz., at an estimated cost of \$18,255,000. It further authorized the project on Pinal Creek, Ariz., at an estimated cost of \$1,300,000.

The House bill contained none of these projects.

The proposed conference substitute is the same as the Senate amendment.

#### *San Francisco Bay area*

The authorization of the project Corte Madera Creek, Marin County, Calif., contained by the House bill was modified by the Senate amendment by the addition of a requirement that local interests contribute in cash 3 percent of the Federal construction of the Rose Valley unit (approximately \$158,000).

The proposed conference substitute is the same as the Senate amendment.



*San Joaquin River Basin*

Both the House bill and the Senate amendment authorized a modification of the New Melones project, Stanislaus River, Calif., at an estimated cost of \$113,717,000. In addition, the House bill contained certain requirements with respect to this project which were eliminated by the Senate amendment. These requirements were as follows:

1. Upon completion, the project would become a part of the Central Valley project and be operated and maintained by the Secretary of the Interior in accordance with reclamation laws, except flood control operations.

2. The Stanislaus River channel from Goodwin Dam to the San Joaquin River would be maintained by the Secretary of the Army to a capacity of at least 8,000 cubic feet per second, subject to local interests maintaining private levees.

3. Before diverting any water from the Stanislaus River Basin in connection with the operation of the Central Valley project, the Secretary of the Interior would determine water requirements to meet all present and future needs in that basin and subordinate diversions to the quantities so determined.

4. The Secretary of the Army would take necessary action to insure preservation of fish and wildlife on the project and allocate to that project an appropriate share of the construction costs which would be nonreimbursable.

5. The Secretary of the Army would construct basic public recreation facilities including necessary land acquisition, and the cost thereof would be nonreimbursable and nonreturnable.

6. Contracts for the sale and delivery of electric energy available from the Central Valley power system as a result of the plants authorized by this section and their integration with the Central Valley system would be made in accordance with preferences set forth in the Federal reclamation laws, except that a first preference of up to 25 percent of the additional energy would be given under the reclamation laws to preferred customers in Tuolumne and Calaveras Counties, Calif., for use in those counties if such customers are ready, able, and willing within one year of notice of availability by the Secretary to enter into contracts for such energy, and such preference customers may exercise their option on the same date in each successive 5th year if written notice of such intention to so use the energy is given to the Secretary at least 18 months before such date.

7. The Secretary of the Army would give consideration during preconstruction planning of the project to the advisability of including storage for the regulation of streamflow for the purposes of downstream water control.

The proposed conference substitute is the same as the House bill except that requirement No. 4 relating to costs of fish and wildlife preservation is revised to eliminate the nonreimbursable provision and requirement No. 6 relating to preferential sales of electric energy is revised to provide that such first preference shall be given to the extent needed and fixed by the Secretary of the Interior but not to exceed 25 percent of such energy shall be given first preference.

The Senate amendment authorized a project on Mormon Slough, Calaveras River, Calif., at an estimated cost of \$1,960,000.

The House bill contained no such project. The proposed conference substitute is the same as the Senate amendment.

*Los Angeles River Basin*

The House bill authorized an additional \$3,700,000 for the Los Angeles River Basin.

The Senate amendment provided an authorization for the Los Angeles River Basin of \$38,000,000.

The proposed conference substitute follows the House version.

*Rogue River Basin*

The project for the Rogue River, Oregon and California, authorized by the House bill was modified by the Senate amendment (1) to the conditions of local cooperation specified in the report of the Chief of Engineers published as House Document Numbered 566, Eighty-seventh Congress, and (2) by the elimination of the requirement in the House bill that water for all purposes shall be released in the quantities and qualities at the points described in the district engineers report and its appendices.

The proposed conference substitute is the same as the Senate amendment.

*Columbia River Basin*

The Senate amendment provided an additional authorization of \$226,000,000 for the projects and plans for the Columbia River Basin including the Willamette River Basin and modified those projects and plans to include the following listed projects:

Knowles Dam and Reservoir, Flathead River, Montana;

China Gardens Dam, Snake River, Idaho and Oregon;

Asotin Dam, Snake River, Idaho and Washington;

Bruces Eddy Dam and Reservoir, North Fork, Clearwater River, Idaho;

Strube Reregulating Dam and Reservoir, South Fork, McKenzie River, Oregon;

Gate Creek Dam and Reservoir, Gate Creek, Oregon;

Fern Ridge Dam and Reservoir modification, Long Tom River, Oregon;

Cascadia Dam and Reservoir, South Santiam River, Oregon.

The Senate amendment also provided that the depth and width of the Columbia-Snake River barge navigation project channel be established as 14 feet and 250 feet, respectively, at minimum regulated flow.

It further provided that Knowles Dam and Reservoir, Flathead River, Mont., be constructed, operated, and maintained by the Bureau of Reclamation and authorizes \$50,000,000 for partial accomplishment of that project.

The House bill authorized the project for the Asotin Dam and Reservoir, Snake River, at an estimated cost of \$99,818,000 and the project for the China Gardens Dam and Reservoir, Snake River, at an estimated cost of \$74,777,000. These projects were within the larger group authorized by the Senate amendment.

The proposed conference substitute is the same as the Senate amendment except (1) the additional authorization of \$226,000,000 for projects and plans for the Columbia River Basin is omitted; and (2) the following listed projects contained in the Senate amendment are deleted:

Knowles Dam and Reservoir, Flathead River, Mont.; and

China Gardens Dam, Snake River, Idaho and Oreg.

In taking its action authorizing Bruces Eddy Dam and Reservoir, North Fork, Clearwater River, Idaho, the conferees were aware of the objections that have been made to this project by numerous groups interested in fish and wildlife conservation. It is the intention of the conferees that the Secretary of the Army shall adopt appropriate measures to insure the preservation and propagation of fish and wildlife affected by this project, and shall allocate to the preservation and propagation of fish and wildlife, as provided in the act of August 14, 1946 (60 Stat. 1080), an appropriate share of the cost of constructing this project and of operating and maintaining the same.

The Senate amendment authorizes the project for Burns Creek Dam and Reservoir, Snake River, Idaho, at an estimated cost of \$52,000,000.

The House bill did not authorize this project.

The proposed conference substitute does not contain this authorization.

*Wynoochee River*

The Senate amendment authorized the project for the Wynoochee River, Wash., at an estimated cost of \$40,211,000 with the requirement that the power generating facilities shall not be installed until a reexamination report has been submitted to Congress. The House bill contained no such project.

The proposed conference substitute is the same as the Senate amendment.

*Cook Inlet, Alaska*

The House bill authorizes a project for Bradley Lake, Cook Inlet, Alaska, at a cost of \$45,750,000.

The Senate amendment modified this authorization to require that the operation and maintenance of the project shall be through the Secretary of the Interior.

The proposed conference substitute is the same as the House bill.

*Snettisham project*

The House bill did not contain an authorization for the Snettisham project.

Subsection (a) of section 204 of the Senate amendment authorizes the Secretary of the Army, acting through the Chief of Engineers, to construct, and the Secretary of the Interior to operate and maintain, the Crater-Long Lakes division of the Snettisham project near Juneau, Alaska, at an estimated cost of \$41,634,000.

Subsection (b) of section 204 of the Senate amendment directs the Secretary of the Interior to dispose of electric power and energy so as to encourage the most widespread use thereof at the lowest possible rates consistent with sound business principles. It requires rate schedules to be so drawn as to have due regard to the recovery of costs of producing and transmitting the energy, including amortization of capital with interest. Preference in the sale of power and energy is to be given Federal agencies, public bodies, and cooperatives, and it is to be a condition of every contract of sale to a purchaser for resale that such purchaser will deliver power and energy to Federal agencies within its transmission area at a reasonable charge for the use of its transmission facilities. All receipts are to be covered into the Treasury as miscellaneous receipts.

Subsection (c) of such section 204 authorizes the appropriate Secretary to make necessary rules, regulations, and agreements, and otherwise do such things as may be necessary, to carry out the purposes of the provision.

The proposed conference substitute is the same as the Senate amendment.

*Waurika project*

The House bill did not contain any provision authorizing the Waurika reclamation project.

Section 205 of the Senate amendment authorized the Secretary of the Interior to construct, operate, and maintain the Waurika reclamation project, Oklahoma; provided for allocation of the cost of this project among a number of purposes; authorized transfer to a water users' organization the care, operation, and maintenance of certain works; authorized construction of certain recreational facilities; and authorized an appropriation of \$25,019,500 for construction, and a continuing authorization for operation and maintenance.

The proposed conference substitute does not contain this provision.

*Small projects*

The House bill amended section 205 of the Flood Control Act of 1948 to increase the scope of application of that provision of law. The House bill, among other things, increased from \$400,000 to \$2,000,000 the ceiling upon the amount authorized to be allocated to a project in any one locality and provided that no construction should be under-



taken under this section on a project with a Federal cost in excess of \$1,000,000, unless that project had been approved by resolutions adopted by the Committees on Public Works of the House of Representatives and the Senate, respectively.

The Senate amendment reduced to \$1,000,000 the amount which can be allocated to a project for any one locality and eliminated completely the provisions relating to approval by resolutions of the committees of the Congress.

The proposed conference substitute is the same as the Senate amendment.

#### *Emergency fund*

Section 207 of the Senate amendment amends section 5 of the Flood Control Act approved August 18, 1941, to extend the application of the emergency fund authorized in that section to emergency conditions relating to federally authorized hurricane or shore protection necessary to protect against imminent and substantial loss of life and property, and for the repair and restoration of any federally authorized hurricane or shore protective structure damaged or destroyed by wind, wave, or water action of other than an ordinary nature when necessary in the discretion of the Chief of Engineers for the adequate functioning of the structure for hurricane or shore protection.

The House bill contained no such provision.

The proposed conference substitute is the same as the Senate amendment.

#### *Park and recreational facilities*

Section 208 of the Senate amendment amends section 4 of the act of December 22, 1944, as amended, to revise existing law relating to the authority of the Secretary of the Army to construct, maintain, and operate public parks and recreational facilities.

This revision is essentially the same as existing law, except that—

1. Existing law is expanded to include recreational facilities not only in reservoir areas but also in any water resource development project under the control of the Army.

2. The construction, maintenance, and operation of recreational facilities is authorized to be carried out by local interests (particularly those to be operated and maintained by such interests).

The House bill contained no such provision.

The proposed conference substitute is the same as the Senate amendment.

#### *Improvement, reconstruction, and maintenance of public roads*

Section 209 of the Senate amendment amends section 207 of the Flood Control Act of 1960 to substitute a revision of existing law relating to utilization, construction, and relocation of public roads in connection with the construction of flood control, navigation, or multiple-purpose projects for the development of water resources.

This revision is essentially the same as existing law except that it has been expanded to include irrigation projects constructed by the Bureau of Reclamation and a provision has been added that whenever a substitute road is to be constructed, if a State or political subdivision thereof requires that it be constructed to a higher standard than would otherwise be applicable and the requesting State or political subdivision pays before the beginning of construction the additional necessary costs, then such road is authorized to be constructed at the requested higher standard. Federal costs under section 207(c) of the Flood Control Act of 1960 are to be part of the non-reimbursable project costs.

The House bill contains no provision on this subject.

The proposed conference substitute is the same as the Senate amendment.

#### *Savannah River*

Both the House bill and the Senate amendment grant to Duke Power Co. authority to construct, maintain, and operate a dam across the Savannah River between Anderson County, S.C., and Elbert County, Ga.

The proposed conference substitute deletes this authorization.

#### *Trotters Shoal Reservoir*

Section 210(b) of the Senate amendment authorized the project for Trotters Shoal Reservoir on the Savannah River at an estimated cost of \$78,700,000 subject to the approval of the President.

The House bill contained no such provision.

The proposed conference substitute does not contain this provision.

#### *Flood control surveys*

Section 211 of the Senate amendment authorized the same surveys for flood control as were contained in the House bill, and added other surveys.

#### *Arkansas River Basin*

The Senate amendment authorized a survey for flood control of the Arkansas River Basin, with reference to the effect of Eufaula and Keystone Reservoirs, Okla., on the water supply facilities of the cities of McAlester and Yale, respectively, to determine the extent of Federal participation in the replacement of such facilities in equity without regard to other limitations.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment, but changes the phrase "the extent of Federal participation" to read "the extent, if any, of Federal participation" in order to make it clear that this legislation does not constitute a commitment that there will necessarily be any such Federal participation.

#### *Cumberland River*

The Senate amendment authorized a survey for flood control of the Cumberland River, Kentucky and Tennessee, with reference to the effect of the Barkley Dam project, on the water supply and sewage treatment facilities of Cadiz, Kuttawa, and Eddyville, Ky., and the State penitentiary at Eddyville, Ky., with a view to determining the extent of Federal participation in replacement of such facilities in equity without regard to existing limitations.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment, but changes the phrase "the extent of Federal participation" to read "the extent, if any, of Federal participation" in order to make it clear that this legislation does not constitute a commitment that there will necessarily be any such Federal participation.

#### *Missouri River Basin*

The Senate amendment authorized a survey for flood control of the Missouri River Basin, with reference to the effect of Oahe and Garrison Reservoirs, North and South Dakota, on the sewage treatment facilities of Bismarck and Mandan, N. Dak., respectively, with a view to determining the extent of Federal participation in the sewage treatment facilities without regard to existing limitations.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment, but changes the phrase "the extent of Federal participation" to read "the extent, if any, of Federal participation" in order to make it clear that this legislation does not constitute a commitment that there will necessarily be any such Federal participation.

#### *Kaskaskia River levees*

The Senate amendment authorized with respect to the Kaskaskia River levees, Illinois, a review of requirements of local cooperation.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment.

#### *Puget Sound, Wash.*

The Senate amendment authorized a survey of Puget Sound, Wash., in the interest of flood control, navigation, and other water uses and related land resources.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment.

#### *Harbors and rivers in Hawaii*

The Senate amendment authorized a survey of harbors and rivers in Hawaii.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment.

#### *Waimea River, Kokee Area, Kauai, Hawaii*

The Senate amendment authorized a survey for multiple purposes of Waimea River, Kokee Area, Kauai, Hawaii.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment.

#### *Waipio River, Island of Hawaii*

The Senate amendment authorized a survey for multiple-purpose development of Waipio River, Kohala-Hamakua Coast, Island of Hawaii.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment.

#### *Iao River, Hawaii*

The Senate amendment authorized a survey of Iao River, Wailuku, Maui, Hawaii.

The House bill did not authorize this survey.

The proposed conference substitute is the same as the Senate amendment.

#### *Missouri River Basin*

Section 212 of the Senate amendment authorizes an additional \$100,000,000 for continuing the works in the Missouri River Basin to be undertaken by the Secretary of the Interior under the comprehensive plan adopted by section 9(a) of the act approved December 22, 1944.

The House bill did not contain such authorization.

The proposed conference substitute does not contain this authorization.

#### *Chicot County bridges*

Section 213 of the Senate amendment authorizes the Secretary of the Army to replace the bridge over Boeuf River, Chicot County, Ark., approximately 3 miles north of the county line, and the bridge over Big Bayou, Chicot County, Ark., approximately 2 miles upstream from its confluence with the Boeuf River which were destroyed recently by floods at an estimated cost of \$115,000.

The House bill did not authorize these bridges.

The proposed conference substitute is the same as the Senate amendment.

#### *Wilkesboro Reservoir*

Section 214 of the Senate amendment designates the Wilkesboro Reservoir as the W. Kerr Scott Dam and Reservoir in honor of the late Senator Scott of North Carolina.

The House bill did not contain this provision.

The proposed conference substitute is the same as the Senate amendment.



**TITLE III—WABASH BASIN INTERAGENCY WATER RESOURCES COMMISSION**

The Senate amendment contained a title III which establishes the Commission to be known as the Wabash Basin Interagency Water Resources Commission.

Subsection (a) of section 302 recites the necessity for a full and complete investigation and study and survey of land and water resources within the Wabash River Basin consisting of the watershed of the entire Wabash River and its tributaries, located within the States of Indiana and Illinois.

Subsection (b) of section 302 provides the Commission will be the principal agency for coordination of Federal, State, and local plans for this basin; will prepare and keep up to date the comprehensive integrated joint plan for such basin; will recommend a long-range schedule of priorities for collection and analysis of basic data, for investigation and project planning, and for construction of projects in the basin; and will foster and undertake studies of water resources problems in the basin.

Section 303 provides for the composition and appointment of the Commission.

Section 304 provides for the organization and administration of the Commission.

Section 305 provides the functions and duties of the Commission. These are as follows: (1) to engage in such activities, and make such studies and investigations necessary or desirable to carry out section 302, (2) to submit annually to the President, Congress, and other interested agencies a report on its work, and (3) to submit, after proper clearance with interested agencies, to the President, a comprehensive integrated joint plan for water and related resources development in the Wabash Basin.

Subsection (b) of section 305 provides for periodic reports by individual members of the Commission to the agencies or States or other commissions from which he was appointed.

Section 306 provides the necessary authority to hold hearings, take testimony, print and distribute proceedings and reports, acquire space, and other necessary authority to carry out the provisions of this title, including the appointment of personnel.

Section 307 provides that members of the Commission appointed from agencies of the Federal Government shall receive no additional compensation and that certain other members of the Commission shall receive compensation at the rate of \$75 per day but not more than \$7,500 in any one year.

The House bill contains no such provision.

The proposed conference substitute does not contain this title.

*Early hearings*

The managers on the part of the House made a commitment that the Committee on Public Works of the House would hold public hearings as soon as practicable after the next Congress convenes on the following projects which were considered by the conferees and which are not included in this conference report: Cape Fear River Basin, N.C.; Flint River, Ga.; the South Fork of the Cumberland River, Ky. and Tenn.; Knowles Dam and Reservoir, Flathead River, Mont.; Burns Creek Dam and Reservoir, Snake River, Idaho; Waurika Reclamation project, Oklahoma; Savannah River—Duke Power Co., South Carolina and Georgia, and Trotter's Shoal Reservoir, Savannah River.

CLIFFORD DAVIS,  
JOHN A. BLATNIK,  
ROBERT E. JONES,  
WILLIAM C. CRAMER,  
JOHN F. BALDWIN, Jr.,

*Managers on the Part of the House.*

Mr. DAVIS of Tennessee. Mr. Speaker, I ask unanimous consent for the immediate consideration of the conference report on the bill H.R. 13273, and

ask unanimous consent that the statement of the managers on the part of the House be read in lieu of the report.

The Clerk read the title of the bill.

The SPEAKER. Is there objection to the request of the gentleman from Tennessee?

Mr. SMITH of Virginia. Reserving the right to object, Mr. Speaker, this bill has been a matter of considerable controversy. The membership of the House are not informed as to what is in it. From all I can hear about it, I believe they have arrived at a rather satisfactory report, but I do not think we should pass this matter without a little consideration. I do sort of hope the conferees, since we have to wait around here, anyway, would defer that at least for half an hour, and let us take a look at it.

I do not want to be insistent about it, I do not want to be contrary about it, but I have a considerable interest in it, as the gentleman knows. He and I worked together on it satisfactorily. I would like to know, for instance, if any new projects have been put into it in conference. I would like to know if any matters have been taken out of the bill that were agreed to by both houses.

Mr. HALLECK. Mr. Speaker, will the gentleman yield?

Mr. SMITH of Virginia. I yield to the gentleman from Indiana.

Mr. HALLECK. I would like to say that, like the gentleman from Virginia, I have followed the actions of this conference very carefully. I would say without any reflection on the Members of the other side of the Capitol that our conferees in my opinion have done a very good job. There was one item in the bill as it passed the House that has been taken out by conference action. For that I am sorry. But beyond that, in my opinion, this conference action has pretty substantially supported the House position.

Mr. Speaker, I might say in addition to that I can see no reason why with the adoption of this conference report and another conference report having to do with appropriations that we cannot have a sine die adjournment resolution and adjourn tonight.

Mr. SMITH of Virginia. That is an end very much desired by all of us, I am sure. But does the gentleman not think everybody would be happier if we did have a half hour or so.

Mr. DAVIS of Tennessee. Mr. Speaker, will the gentleman yield?

Mr. SMITH of Virginia. I am glad to yield to my colleague.

Mr. DAVIS of Tennessee. I am sure the conferees on the other side would be glad to discuss the final report of the conference committee, which was unanimous. But I really cannot see that there is any disagreement on the conference report after the long and laborious work on the part of the conferees, and I should be delighted to take a few minutes and explain to the gentleman from Virginia some of the things that we took out and to explain the amount of money by which we reduced the bill which, in fact, I think this House will be delighted to hear. We went into the conference to sustain the position of the House and

we came out, I might say to the gentleman from Virginia, with that position of the House sustained, and I am delighted to report our action to this House and that is what we promised the membership.

Mr. SMITH of Virginia. Mr. Speaker, let me say I have conferred with the gentleman from Tennessee on numerous occasions about this bill. He has stood firm with reference to the position of the House as far as it was humanly possible to do so, and I doubt if very many Members of the House would have been able to sustain the position of the House as the gentleman from Tennessee has done. Personally, I want to thank him for his aggressive work and to thank him for, perhaps, his obstinacy, if you want to call it that—I do not think he can be rated with a certain group referred to yesterday by one of the gentlemen from the other body. But, certainly, he has maintained his position with great force and effectiveness and I want to pay my compliments to him for the work that he has done. In view of that, Mr. Speaker, I shall not object to the gentleman's request but I do hope he will give us a fairly complete explanation of the conference report.

The SPEAKER. Is there objection to the request of the gentleman from Tennessee [Mr. DAVIS]?

There was no objection.

The Clerk read the statement.

Mr. DAVIS of Tennessee (during the reading of the statement). Mr. Speaker, I ask unanimous consent that the further reading of the statement of the managers on the part of the House be dispensed with, and that it be printed in the RECORD.

The SPEAKER. Is there objection to the request of the gentleman from Tennessee?

There was no objection.

Mr. DAVIS of Tennessee. Mr. Speaker, I yield myself such time as I may require.

Mr. Speaker, I have been here, in the annals of some, for quite a long while. I am now beginning the 23d year of my service. I have been on the Committee on Public Works for a long while and I have participated in the drafting and the presentation of a great number of public works omnibus bills. In all of the years in which I have participated this has been quite the most laborious task that I have ever undertaken.

There are many reasons for this. When we brought this bill to the House it carried a money value—and I am speaking in round figures—of \$2,300 million. The other body raised this figure by \$1,495 million. Some seem to think it is a little more, but all of those who have added up the figures admit that it was at least \$1,495 million.

Mr. JOHANSEN. Mr. Speaker, I make the point of order that a quorum is not present.

Mr. DAVIS of Tennessee. Mr. Speaker, I hope my good friend will withdraw that because it will take me but a few minutes to conclude my statement.

Does my dear friend from Michigan insist on the point of order? It will take



me but a few minutes to finish the statement.

The SPEAKER. The Chair will count. Mr. JOHANSEN. Mr. Speaker, I withdraw my point of order.

Mr. DAVIS of Tennessee. Mr. Speaker, I have long known my distinguished friend and colleague from Michigan, I know of his long devotion to our late friend, Paul Shafer, of Michigan, who was one of my dearest and warmest friends. I just felt my colleague, the gentleman from Michigan [Mr. JOHANSEN], would not further delay the proceedings of this House. I just knew he would not, and I am grateful.

Mr. Speaker, this was a tedious job. We brought out a bill carrying a price tag, if I may use the expression, of \$2,300 million. As the chairman of the Flood Control Committee, I gave assurances to the chairman and the members of the Rules Committee that to the very best of our ability we would sustain the position of the House.

It will be recalled that when we came to the House I gave assurances to the House that we would sustain so far as possible the position of the House.

It will be recalled further I asked at that time, in a spirit of cooperation, that if we promised full and complete hearings early next year on the projects in controversy, I pled with the Members of the House that they not offer a single amendment suggesting the addition of a single project to this bill. Many of my colleagues were rather amazed because, you will recall, in a spirit of absolute honesty, in a spirit of absolute fair play, and I shall never forget this the longest day I live, the Members of this House took me, speaking for my committee as a whole, at my word, and not a single amendment was offered to add a single project to this bill.

So, then, we debated the bill. On one project we did not prevail. That was defeated on a recommittal motion. On three others we did prevail. So, then, when objection was lodged, it was necessary to go before the Rules Committee to get a rule, and again I made assurances on the part of the committee in the House that we would do our best to sustain the position of the House.

So I am delighted humbly to tell you that after long, hard, laborious, and tedious conferences, we come back to you with a unanimous conference report, and I am more than delighted, humbly, to tell you that in that unanimous report we have come back with about \$2,300 million, or almost exactly the money value of the bill as it left the House. In that as long as we live we will feel that we have absolutely kept our word to the Rules Committee and to the House to bring that bill back to you, and we bring it back to you just as we passed it and as you passed it.

Mr. ALBERT. Mr. Speaker, will the gentleman yield?

Mr. DAVIS of Tennessee. I yield to the distinguished majority leader.

Mr. ALBERT. Mr. Speaker, I do not wish to delay the House consideration of this matter, but I think it should be said that the gentleman from Tennessee [Mr. DAVIS] has performed a legislative miracle. He has sustained the position of

the House. He has accomplished his job against very difficult odds in a minimum amount of time. He and his conferees deserve the commendation of us all, including those of us who were hopeful other projects might have been included in the conference report, such as the Waurika project in Oklahoma.

Mr. BOGGS. Mr. Speaker, will the gentleman yield?

Mr. DAVIS of Tennessee. I yield to my distinguished friend and colleague, the gentleman from Louisiana [Mr. BOGGS].

Mr. BOGGS. Mr. Speaker, I should like to join in the commendation of the distinguished majority whip and to add that the gentleman from Tennessee [Mr. DAVIS] also brought back a very difficult assignment. The gentleman from Minnesota [Mr. BLATNIK] and the gentleman from Alabama [Mr. JONES], who assisted him, are also to be commended. He also had the able assistance of his minority Members, headed by the gentleman from Florida [Mr. CRAMER].

Mr. JENNINGS. Mr. Speaker, will the gentleman yield?

Mr. DAVIS of Tennessee. I yield to the gentleman from Virginia.

Mr. JENNINGS. Mr. Speaker, I want to commend the gentleman from Tennessee and those members of the Conference Committee who have brought back this conference report.

However, there is one project that meant a great deal to many of us which was contained in the House bill when it passed the House. It was also in the Senate bill when it passed the Senate. I refer to the Savannah River project—the Duke Power project—which would have used a great deal of coal, and that coal would have been mined in the distressed areas of our great coal fields in this country, not only in my own State of Virginia, but in West Virginia, Kentucky, Tennessee, and others.

I remind my colleagues that this project, which would involve no Federal funds whatsoever, would open new employment opportunities to miners, railroaders, and workers in affiliated industries. When completed, the installation would burn 9,500 tons of bituminous coal per day.

Mr. Speaker, as you know, the coal industry is already hard hit by imports of residual oil and other market inequities. Here is an opportunity to help.

Mr. Speaker, I regret that that project was not left in the conference report.

Mr. Speaker, I was wondering if the gentleman from Tennessee would comment as to the possibilities of this project which would mean so much to my area?

Mr. DAVIS of Tennessee. Mr. Speaker, if I may have the attention of the House, I should like to state this:

We recognize that the basin authorizations must be taken up early next year. With the consideration of the basin authorizations we are going to take up the Duke Power project, the Trotty Shoals project, along with, if I may say, the Devil's Jump project, the Knolls project, the Flint River project, the Cape Fear project, the Burns Creek project,

and the Waureka project, along with the basins. We have promised and reduced it to writing in the conference report that early in January we will have further hearings in order to bring them out to the floor in advance of any consideration that the Appropriations Committee will give to these projects in the late spring or early summer.

Mr. HALLECK. Mr. Speaker, will the gentleman yield?

Mr. DAVIS of Tennessee. I certainly yield to the distinguished minority leader.

Mr. HALLECK. Mr. Speaker, the majority whip has spoken of the fine work performed by our conferees, and in that statement I join. As the minority leader, I am sure the gentleman would agree with me that the gentleman from California [Mr. BALDWIN] and the gentleman from Florida [Mr. CRAMER] have performed admirably as representatives of the House of Representatives in this conference.

Mr. Speaker, I too am sorry that the Duke power project is not included in the bill. Having followed this matter, I know of the situation that developed and to retain it in the bill apparently became pretty much of an impossibility. Certainly, as far as I am concerned, I want to say to the gentleman from Tennessee that I shall do as much as I can in the early days of the next session—that is, assuming I am back, about which there is a little dispute now, but I guess I will make it if we finally adjourn so I can get home and see my people—but in any event I shall do what I can in behalf of that project.

Mr. Speaker, while we in Indiana have been interested in a project which is not in this bill and which was not in the bill as it passed the House, I venture to express the hope that before we come back in January the Bureau of the Budget and the administration will have seen fit to approve the Burns Waterway Harbor in northern Indiana in my district, and I trust that the gentleman from Tennessee [Mr. DAVIS] then would give it the sympathetic consideration that I just know he will.

Mr. RIVERS of South Carolina. Mr. Speaker, will the gentleman yield?

Mr. DAVIS of Tennessee. I yield to the gentleman from South Carolina.

Mr. RIVERS of South Carolina. Mr. Speaker, based upon what the gentleman from Tennessee has said, we can understand that there will be another public works bill next year containing these projects, plus other projects reported by the Army Engineers on projects they are now studying?

Mr. DAVIS of Tennessee. Mr. Speaker, many of the basin authorizations have to be changed, and while I cannot guarantee what the full committee will do about specific projects, I say that early in January we will have hearings.

Mr. DORN. Mr. Speaker, will the gentleman yield?

Mr. DAVIS of Tennessee. I yield.

Mr. DORN. Mr. Speaker, I would like to say to my distinguished and beloved friend from Tennessee, the chairman of the House conferees, that he did an outstanding job. Also I want to thank the



members of the minority who stood by the House of Representatives on the Duke project, even though it passed through this House in a breeze, with no opposition. It was also adopted in the other body. But I still want the gentleman to know that I am grateful to the conferees; I am grateful to the distinguished Speaker, the majority leader, the minority leader, the chairman of the Rules Committee, and all the Members of this House who stood by the House position. I lost this round. The next round will come up in January.

I do want to say this to the distinguished gentleman from Tennessee as a reminder to the House, that this would have been the largest steamplant on the face of the earth, a \$300 million plant, in line with the President's program to get the economy moving; \$26 million worth of coal annually from the distinguished gentleman's State and the States of West Virginia and Pennsylvania; 9,500 tons daily over the Seaboard, the Southern, and the Atlantic Coast Line.

I am happy that the distinguished gentleman from Tennessee is able to assure me that this project, next January, will receive the earnest and careful consideration of this House. I extend my thanks to him, to the Speaker, the majority leader, the chairman of the Rules Committee, and all of them.

Mr. JONAS. Mr. Speaker, will the gentleman yield?

Mr. DAVIS of Tennessee. I yield.

Mr. JONAS. Mr. Speaker, I thank the gentleman from Tennessee for yielding. I just wanted to make this comment, following the remarks of my friend from South Carolina who recounted the vast amount of money that would be involved in this project and the tremendous benefits and advantages that would accrue to so many people, to point out in addition to that, that all of this money would be provided by the Duke Power Co. without involvement of the Federal Government or taxpayers' money. I certainly regret that the conference committee saw fit to knock this project out of the bill. In my judgment it was the best project in the bill. I realize that the gentleman had his obligations, and I am expressing only one man's opinion; but it does seem to me that this is a project we should have authorized since it would not have cost the taxpayers a single dime.

Mr. FLYNT. Mr. Speaker, will the gentleman yield?

Mr. DAVIS of Tennessee. I yield.

Mr. FLYNT. Mr. Speaker, I would like to add my commendation to the others that have been offered to the distinguished gentleman from Tennessee, the chairman of the House committees, and the other members of the House conferees. Naturally, I wish that the Flint River project were included in the conference report. I have every belief that the distinguished gentleman from Tennessee will confirm his previous statement that it will be brought up and will receive the support of his committee in January of 1963.

Mr. KEARNS. Mr. Speaker, will the gentleman yield?

Mr. DAVIS of Tennessee. I yield to the gentleman from Pennsylvania.

Mr. KEARNS. Mr. Speaker, the most grateful man in the Congress today is CARROLL KEARNS because, I say to the gentleman, you took care of my area in a flood control district. I want to commend you now.

Mr. DAVIS of Tennessee. I thank the gentleman so much. I think I can say to both sides of the aisle that we are going to miss you greatly in the next session.

Mr. WICKERSHAM. Mr. Speaker, will the gentleman yield?

Mr. DAVIS of Tennessee. I yield to the gentleman from Oklahoma.

Mr. WICKERSHAM. I thank the gentleman for saying that Waurika project will be considered in January. This does not preclude the consideration of other projects which were not considered in this bill, does it?

Mr. DAVIS of Tennessee. That is correct.

If you will give me just 2 minutes more, because I think on a bill of this magnitude we have certainly transgressed on the time of the House but mildly, may I say that we have come back sustaining the position of the House almost to the dollar. This has not been an easy task, but I want you to know that never in all of the 22 years I have been here have I had such cooperation on the part of two of my grand friends and colleagues, BOB JONES, of Alabama, and JOHN BLATNIK, of Minnesota, two of the ablest men in this whole House of Representatives. They both came back from their districts to see this through in the last 24 hours.

May I say further that in all of my experience I have never had more delightful dealings with two more able, intelligent, and dedicated men on the minority side, BILL CRAMER, of Florida, and JOHN BALDWIN, of California. Those two men are as earnest men as I have ever known in my life. All of us worked together faithfully today and finally signed the report. You do not have this too often on a bill of magnitude, but, if I may have your attention a moment or two longer, may I say that I shall forever cherish the fine fellowship of these two men along with BOB JONES and JOHN BLATNIK.

I want to say another thing. We have been privileged to have with us over the years Dick Sullivan, of New York, and Joe Brennan, our professional consultant, who has the respect of all of us on both sides of the aisle.

We also had with us Joseph F. Van Vladriken—we always called him "Van"—chief administrative assistant in the Projects Development Branch of the Civil Works Division, Office of the Chief of Engineers, who is so capable and so efficient. We passed the bill and the Senate passed it. These men worked over the weekend, on the Sabbath Day, and came in on Monday with a complete analysis of this bill so we could look at it.

Then we are indebted to Robert L. Monson, who is the assistant legislative counsel. These men, along with Cliff Enfield, the minority counsel, an

able lawyer, were of great assistance to us.

So I come to you tonight with a heart full of gratitude that we had competent, able, dedicated conferees, with an able staff, so that we were able to maintain the position of the House on a bill of this magnitude.

So, with appreciation to the Speaker of the House, the chairman of the Committee on Rules, the gentleman from Virginia [Mr. SMITH], and the minority leader, the gentleman from Indiana [Mr. HALLECK], and all who helped us as we were seeking to help you adjourn the House of Representatives tonight, we have come in with this bill.

So, Mr. Speaker, with a heart full of gratitude I yield 5 minutes to the distinguished gentleman, my friend, one of the ablest Members of the House, the gentleman from Florida [Mr. CRAMER].

Mr. SPRINGER. Mr. Speaker, will the gentleman yield?

Mr. CRAMER. I yield to the gentleman.

Mr. SPRINGER. Mr. Speaker, passage today—on what could be the last day of the 87th Congress—of the omnibus rivers and harbors public works bill would mean the fulfillment of a dream long held by the people in my congressional district. In a sense, it would not mean the actual fulfillment of that dream, but it would mean the dream's fulfillment in due course of time.

Contained in this bill, Mr. Speaker, is authorization for a dam and reservoir at the Oakley site on the Sangamon River, a part of the Illinois rivers and tributaries project. Oakley Dam and Reservoir, when completed and in operation, will prevent much of the costly annual flooding in the area which washes away rich, fertile topsoil from farms in one of the best, most productive farming areas in the entire United States. This topsoil, lost to posterity, becomes a nuisance at present in that it is carried down the Sangamon to Lake Decatur, clogging that body of water and reducing the water supply of the city of Decatur. Moreover, Oakley Dam and Reservoir will furnish to the city of Decatur an additional supply of water, desperately needed right now. It will also supply water to Decatur in sufficient quantity for Decatur's foreseeable future needs. I might add, Mr. Speaker, that Decatur is ready, willing, and able to pay the costs of Oakley attributable to water supply—some \$4,500,000.

It will be at this time, when Oakley Dam and Reservoir are operational, that Decatur's dream will come true.

It has been 8 long, hard years, from the time I was first contacted in 1954 in regard to the possibility of building a dam at Oakley, until now when the Congress is about to give its authorization for the dam's construction. These 8 years have had their high points, and they have had their lows. There was a time, in 1958, when it appeared that all systems were "go" on Oakley. But the Corps of Engineers' price tag on the Illinois rivers and tributaries project was \$330 million, which the Bureau of the Budget said was too high in relation to the benefits to be derived. So a resurvey



was ordered, a survey which further delayed Oakley 3 agonizing years. I know that I watched with a sense of frustration—as did the citizens of my district—the rumblings of the wheels of governmental process which, at times, seemed to have ground to a complete halt.

Believe me, Mr. Speaker, I am not complaining about the Corps of Army Engineers. They would have been remiss in their duties had they changed their survey and report to a point where they were careless in their findings of fact. And we, in the Congress, would have been remiss in our duties to all of the people of the United States had we accepted and acted upon such a report.

Finally, in February, the Engineers released their report recommending construction of Oakley Dam and Reservoir. Knowing the report was on its way, on the first day of the second session of the 87th Congress, I introduced a bill to authorize its construction. From that day until today, it seems that hardly a week has passed without something being done on Oakley—starting with a letter to the gentleman from New York [Mr. BUCKLEY], chairman of the House Committee on Public Works, requesting reports on my bill from the interested agencies and departments.

Then came almost endless contacts with the departments, including a personal contact with my good friend and our former colleague, the Honorable Stewart Udall, Secretary of the Interior. Through the departments, through the Bureau of the Budget, back to Engineers, and then back to the Committee on Public Works, I have closely followed every step as Oakley slowly progressed through all the channels which have brought it to this point.

Mr. Speaker, I wish at this time to thank all those who have helped me so greatly in getting Oakley to the floor for vote—members of the Committee on Public Works, staff members of the committee, and all of the various persons in the departments who have been so helpful.

Mr. Speaker, I urge passage to the omnibus public works bill—and Oakley Dam.

Mr. CRAMER. This may not be pertinent at this hour and under these circumstances, but somebody said a minute ago, perhaps, you would like to have us tell you what is in the bill. So now for a few minutes I would like to do that.

To my distinguished colleague, and very able gentleman from Tennessee [Mr. DAVIS] I would like to say it is always a privilege to work with him and with the Committee on Public Works. I am delighted again as in a number of instances in the past that we come to you with a bill which I think in good conscience each and every one of us can support.

I am glad to see this conference report in the shape that it is because it has been my consistent position that we, in this highest legislative body in the world, the Congress of the United States, must acknowledge certain responsibilities to the people of this country and to the taxpayers. Nobody can say that this is a

pork barrel bill. The pork is out of it. Nobody can say that those who are entitled to the right to be heard are being denied that right because these projects that are controversial have been eliminated and will be heard next year. This is in the true democratic tradition—and that is spelled with a little "d" I guess.

So, Mr. Speaker, I am glad to say we have before us what I would call a clean bill that I can wholeheartedly support, and that I think every Member of this House can support. I think it is monumental that the Members of the House were able to cut from this bill, that is, the amounts contained in the bill as recommended by the other body—\$1,434 million. As a matter of fact, I think that is historic. I know of no similar precedent, and I am proud to have had a part in effectuating that cut. Nine hundred million dollars was cut from the basin authorizations to be considered next year.

Waurika was cut out of the bill, \$25 million.

Flynt River, \$151 million.

Cape Fear, \$25 million.

Devil's Jump, \$151 million.

Burns Creek, \$52 million.

Knowles Dam, \$50 million.

Trotter Shoals, \$78 million.

Of course, Duke power along with Trotters Shoals had to be deferred for consideration until next year since it was essential to do that in order to get a bill. So both projects are being deferred.

Let me say to the gentleman from West Virginia [Mr. JENNINGS] and the gentleman from South Carolina [Mr. DORN], and to those who have inquired, and properly so, so far as I am concerned I would have preferred to have had the Duke power project retained because it was noncontroversial and in both bills. There was no controversy about it so far as I am concerned. It was in both bills and I feel that it should have been retained in the final bill. Trotters Shoals proved to be controversial and, obviously, had to be removed from the bill in keeping with the basic criteria of having noncontroversial projects included. Therefore, in order to get a bill it was essential to remove both projects.

I am glad to report to the House that China Gardens was removed, as you recall, from the House bill. As you recall, we had it up on the floor of the House, and we had a vote. It was a close vote. I understand the examiner for the Federal Power Commission has recommended on the Mountain Sheep \$260 and some odd million project—as a private enterprise development. China Gardens is an integral part of that total project so it seemed a logical thing to me that likewise the Federal Power Commission should have the opportunity of considering the China Gardens project. I think that, too, is a tremendous accomplishment.

One concession was made to the other body of a rather substantial nature in that the Bruce Eddy project, an Idaho project on the Columbia River, was included. I think it is significant that one concession in this instance was made to the other body and eight concessions

were made to this body. I think it is salutary. I think we have a sound bill. I think we have a bill that everyone can support. It is a bill that I can wholeheartedly support.

The basic question left is, Are there any projects in this bill that have not cleared the department involved? There are a few that have not cleared the Bureau of the Budget, but in every instance the committee has written into the bill that clearance is essential before the project can be authorized. So I can wholeheartedly support the bill as meeting basic and necessary criteria.

In closing, let me say that the gentleman from California [Mr. BALDWIN] has been of invaluable service to the House and in conference in bringing back this report deserving of our support.

Mr. DAVIS of Tennessee. Mr. Speaker, we have no further requests for time on this side. I think the gentleman from California [Mr. BALDWIN] wants 2 minutes, and these 2 minutes will conclude the debate. I want the House to know that, and I want to thank especially the gentleman from California [Mr. BALDWIN], a valiant conferee.

Mr. BALDWIN. Mr. Speaker, I would like to say to the Members of the House that the chairman of the House conferees, the gentleman from Tennessee [Mr. DAVIS] was absolutely a Rock of Gibraltar in this conference in defending the position of the House. I would like to commend him and I would like to say it was a privilege and an honor to serve with him on this conference committee.

It was our objective, we had announced it to the Rules Committee and we had announced it to the House that all projects added by the other body where House Members wanted the opportunity to be heard and had not had the opportunity to be heard because the House committee had not held any hearings on the subject, or projects added by the other body on which outside witnesses had a legitimate right to be heard but had not been given the opportunity before the House committee, that these projects would be removed from the bill and hearings held on them next year. This is the position we took. We were successful in maintaining that position. We were therefore successful in maintaining the integrity of the House and maintaining the right of interested House Members to have the right to be heard before any action is taken involving projects that may affect their district or their State in which they have a vital interest.

Mr. DAVIS of Tennessee. Mr. Speaker, I move the previous question on the conference report.

The previous question was ordered.

The conference report was agreed to.

A motion to reconsider was laid on the table.

#### NEW ORLEANS SESQUICENTENNIAL CELEBRATION COMMISSION

The SPEAKER. Pursuant to the provisions of section 1, Public Law 87-759, the Chair appoints as members of the Battle of New Orleans Sesquicentennial









Oct 13, 1962

14. LAND GRANTS. Rep. Conte commended the Morrill Act and discussed its relationship to the development of the University of Massachusetts. pp. 22228-9
15. ELECTRIFICATION. Rep. Saylor criticized Clyde T. Ellis, General Manager of the National Rural Electric Cooperative Association and said, "I call upon Clyde Ellis to apologize to the mass of the American people who are satisfied that the great investor-owned electric utility industry ... is the necessary backbone of our economy." p. 22233
16. PERSONNEL. Passed without amendment H. R. 10539, to amend the Federal Employees Health Benefits Act of 1959 to provide additional choice of health benefits plans. pp. 22237
17. ASC COMMITTEES. Rep. Staggers praised the ASC county committees saying, "I commend these farmer committees for their exceptionally fine record of local farm program administration." p. 22245
18. LEGISLATIVE RECORD Rep. Albert summarized the legislative accomplishments of the 87th Congress. pp. 22242-4
19. ADJOURNMENT. Agreed to H. Con. Res. 584, providing for the sine die adjournment of the 87th Congress, and adjourned sine die. pp. 22234, 22252

SENATE - Oct. 13

20. APPROPRIATIONS. The Senate agreed to the conference report on H. R. 12900, the public works appropriation bill for 1963 (the House had agreed to it on Oct. 12), and both Houses agreed to amendments which had been reported in disagreement (pp. 22176-90, 22195-208). This bill will now be sent to the President. As agreed to the bill includes \$400,000,000 for the accelerated public works program, one-third of which is to be used for public works projects in rural areas.

Agreed to a resolution by Sen. Russell (S. Res. 415) requesting this Department "to submit to the Director of the Budget and to the Congress in time to be considered in connection with the first supplemental appropriation bills before the Congress in the 88th Congress the most effective program available for research to discover new uses for agricultural commodities" and that "the Secretary be requested to limit this program to items costing not in excess of \$35,000,000 per annum above current allowances for 1963 for utilization research to discover new uses for agricultural commodities." p. 22191

Agreed to a resolution by Sen. Russell (S. Res. 414) stating "That the Senate respectfully asserts its power to originate bills appropriating money for the support of the Government and declares its willingness to submit the issue either for declaratory judgment by the appropriate appellate court of the United States or to an appropriate commission of outstanding educators specializing in the study of the English language to be chosen in equal numbers by the President of the Senate and the Speaker of the House." p. 22191

Sen. Hayden inserted a summary of the budget estimates, the amounts in the House and Senate versions of the bills, and the final amounts agreed to in conference for all appropriation bills this session of Congress. p. 22192

21. FEED GRAINS. Sen. Morse criticized differential prices of feed grains as discriminating against the Northwest in favor of the Midwest, urged this Department to take action to eliminate differential prices, and inserted several items to support his position. pp. 22163-8

22. PUBLIC WORKS. Agreed to the conference report on H. R. 13273, the public works authorization bill for rivers and harbors and flood control projects. This bill will now be sent to the President. pp. 22172-6
23. AREA REDEVELOPMENT. Sen. Morse inserted a report on the status of area redevelopment projects in Ore. pp. 22160-2
24. RECLAMATION. Sen. Proxmire inserted an editorial commending his fight against an appropriation for preliminary work on the Glen Elder Dam and irrigation project in Kan. p. 22160
25. RECONVENING OF CONGRESS. Both Houses passed H. J. Res. 907, providing that the 88th Congress shall assemble at noon on Wed., Jan. 9, 1963. This measure will now be sent to the President. pp. 22193, 22235
26. ADJOURNMENT. Agreed to H. Con. Res. 584 and adjourned sine die. p. 22194

#### ITEMS IN APPENDIX

27. LEGISLATIVE SUMMARY. Extension of remarks of Reps. Smith, Ia., Toll, Byrnes, Evins, Pucinski, Wallhauser, Westland, and Pfoest reporting on the accomplishments of the 87th Congress. pp. A7631-2, A7650-2, A7655-8, A7659-60, A7686-7, A7698-9, A7700-1, A7714-5
28. BUDGET. Extension of remarks of Sen. Saltonstall inserting a table prepared by the Bureau of the Budget "giving important budgetary figures from 1946 to the present." p. A7652
29. FOREIGN TRADE. Extension of remarks of Rep. Green commending those who supported the President's trade bill and inserting an article on the subject. pp. A7661-2
30. ELECTRIFICATION. Extension of remarks of Rep. Magnuson expressing interest in the approval by REA of a loan to the Big Rivers Rural Electric Cooperative Corp., of Henerson, Ky. pp. A7677-9
31. FARM PROGRAM. Extension of remarks of Rep. Hoeven stating that Rep. Cooley "took issue with several statements which I had made on October 1, 1962, about the New Frontier farm program. I would like to take this opportunity to rebut a few of these criticisms." pp. A7703-4

#### BILLS INTRODUCED

32. LAWS. S.J. Res. 238, by Sen. Javits, providing for the establishment of a Commission on the Revision of Federal Agricultural Laws and Programs; to Agriculture and Forestry Committee. Remarks of author, p. 22077
33. TERRITORIES. H. R. 13413, by Rep. O'Brien, N.Y., to promote the economic and social development of the Trust Territory of the Pacific Islands; to Interior and Insular Affairs Committee.



States by telling a story about a young boy who was coming up an escalator the wrong way. According to Lord Home, he told the boy, "You cannot do that," to which the boy replied, "But I am an American." Lord Home then told his audience, saying he drew no moral, "I turned him round and I put him back on the right and proper road."

I am afraid it is the British, who in my judgment, have been traveling the wrong road. We would be in serious trouble, indeed, if we followed the suggestions of Lord Home about the proper road to travel.

I was incensed when I read this report of Lord Home's speech. I am still angry about it. But I want to make one thing clear. As one who fought in two World Wars side by side with British men and officers, I know there are no more courageous, determined, or resourceful fighters than the British. And if I had to choose anyone with whom to stand with my back against the wall in a last-ditch struggle for survival, I would not hesitate to make that stand with a Britisher. When the chips are down, they are always superb.

But my point is this, Mr. President, the American people would prefer to meet and defeat communism without first placing our backs to the wall and throwing our chips to the ground. There is no reason why at this point we should continue to negotiate ourselves into a dead-end alley where the only alternative is complete surrender or all-out war. There are many other courses we can take today with regard to Cuba, Asia, trade with the Communists, Berlin, and other points of conflict with the Communists which will strengthen our hand and, in my judgment, make all-out conflict less, not more, likely. But such a policy demands more than mere negotiation and wishful thinking. It requires allied cooperation, and even economic sacrifice.

Mr. President, we are not playing tidilywinks with the Communists. We are involved in a serious and dangerous cold war struggle. We cannot afford to lose, and the kind of hesitation, gentleman's agreement, and timid diplomacy which played such a large part in bringing on World War II is even more out of date today than it was a quarter of a century ago. In facing the Communists, we must fight fire with fire and give up the dangerous habit of confusing the form and appearance of international agreement with the real substance of international security which we have so far been unable to achieve through diplomatic method.

#### SOVIET OIL OFFENSIVE

Mr. KEATING. Mr. President, the severity of the threat posed to the security of this country by the Soviet oil offensive was graphically emphasized this week with the release of a report by the National Petroleum Council. This group is an advisory body to the Federal Government, and its membership includes 80 men who are leaders in the field of petroleum production, transport, and sale. Eighteen months ago, the council was asked by the Department

of the Interior to make a factual study of the effects on the free world of the exports of oil from the Soviet bloc. A working committee, headed by George T. Piercy, of Standard Oil, and Robert Ebel, of the Department of the Interior, has produced a voluminous, well-documented report which can only be described as startling.

The committee found that the Soviet Union is the repository of vast untapped oil reserves, and that crude oil production is increasing rapidly and far exceeding all official Soviet plans. Furthermore, the Russians are stepping up their ability to export petroleum by building a major pipeline system which they would not have been able to complete thus far without obtaining materials from the free world. West Germany, Italy, and Sweden alone will supply 40 percent of the entire requirements of the Soviet 7-year plan for 40-inch pipeline.

Our allies are also cooperating in this expansion by building Russian deep sea oil tankers in Western countries. The Soviet tanker fleet will be practically self-sufficient by 1965, and two-thirds of the new tonnage will have been supplied by the free world. It is indeed surprising that the Russians seem to be surpassing even their own production estimates in this field, and distressing that the nations of the free world have formulated no coordinated plan to meet the offensive.

Soviet bloc exports to Western Europe have grown, and in the estimation of the committee which has just produced this important report, Soviet bloc exports will continue to grow. This politically motivated trade offensive has three serious consequences:

First. It reduces the revenues of the oil producing nations of the West.

Second. It enables the Communists to obtain strategic goods and technology in return for oil, from the industrialized nations.

Third. It enables the Soviets to exert political pressure on underdeveloped countries which become dependent upon receiving Soviet oil.

In recent months, I have spoken out many times in an effort to alert the country to this very real danger. It is gratifying that this long-awaited report was finally released, and I commend the National Petroleum Council, and the members of the committee for their excellent presentation. Perhaps this report will serve to awaken the public and government officials to the harsh facts.

On October 26, the Senate Internal Security Subcommittee will meet in New York to hear testimony relating to trade with the Soviet bloc. It is my hope that the witnesses at the hearing will be able to give us additional information on this oil problem in particular. With this objective in mind, the subcommittee staff is preparing to receive testimony from some of the men who compiled this excellent report.

Mr. MANSFIELD. Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

#### RECESS

Mr. MANSFIELD. Mr. President, I move that the Senate stand in recess, subject to the call of the Chair.

The motion was agreed to; and (at 1 o'clock and 20 minutes p.m.) the Senate took a recess, subject to the call of the Chair. At 2 o'clock p.m., the Senate reassembled, when called to order by Hon. LEE METCALF, a Senator from the State of Montana.

#### DESIGNATION OF ACTING PRESIDENT PRO TEMPORE

The legislative clerk read the following letter:

U.S. SENATE,  
PRESIDENT PRO TEMPORE,  
Washington, D.C., October 13, 1962.  
To the Senate:

Being temporarily absent from the Senate, I appoint Hon. LEE METCALF, a Senator from the State of Montana, to perform the duties of the Chair during my absence.

CARL HAYDEN,  
President pro tempore.

Mr. METCALF thereupon took the chair as Acting President pro tempore.

#### MESSAGE FROM THE HOUSE

A message from the House of Representatives, by Mr. Maurer, one of its reading clerks, announced that the House had agreed to the report of the committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H.R. 12900) making appropriations for certain civil functions administered by the Department of Defense, certain agencies of the Department of the Interior, the Atomic Energy Commission, the St. Lawrence Seaway Development Corporation, the Tennessee Valley Authority, and certain river basin commissions, for the fiscal year ending June 30, 1963; that the House receded from its disagreement to the amendments of the Senate numbered 4, 13, and 18 to the bill and concurred therein, and that the House receded from its disagreement to the amendment of the Senate numbered 2 to the bill and concurred therein, with an amendment, in which it requested the concurrence of the Senate.

#### ENROLLED BILLS SIGNED

The message also announced that the Speaker had affixed his signature to the following enrolled bills, and they were signed by the Acting President pro tempore:

H.R. 6371. An act to amend the Internal Revenue Code of 1954 with respect to the limitation on retirement income, and with respect to the taxable year for which the deduction for interest paid will be allowable to certain building and loan associations, mutual savings banks, and cooperative banks;

H.R. 8269. An act for the relief of Dr. Walter H. Duisberg;



H.R. 8517. An act to grant emergency of-  
ficer's retirement benefits to certain persons  
who did not qualify therefor because their  
applications were not submitted before May  
25, 1929; and

H.R. 10561. An act for the relief of Kenyon  
B. Zahner.

# PUBLIC WORKS AUTHORIZATION BILL—CONFERENCE REPORT

Mr. KERR. Mr. President, I submit a report of the committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H.R. 13273) authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes. I ask unanimous consent for the present consideration of the report.

The ACTING PRESIDENT pro tem-  
pore. The report will be read for the  
information of the Senate.

The legislative clerk read the report.

(For conference report, see House pro-  
ceedings of October 12, 1962, pp. 22131-  
22140, CONGRESSIONAL RECORD.)

The ACTING PRESIDENT pro tem-  
pore. Is there objection to the present  
consideration of the report?

There being no objection, the Senate  
proceeded to consider the report.

Mr. KERR. Mr. President, the report  
was agreed to by all the conferees, and is  
signed by all members of the conference  
committee.

The conferees carried on extensive and  
intensive deliberations, and reached an  
agreement which will make it possible  
to carry forward projects which are ex-  
tremely vital to the improvement and  
strengthening of our economy.

There were a number of projects on  
which hearings had not been held on the  
House side, and on which the House con-  
ferees could not agree. The Senate  
receded very reluctantly on these pro-  
jects; but we have received a commitment  
from the managers on the part of the  
House that the Committee on Public  
Works of the House will hold public  
hearings as soon as practicable after the  
next Congress convenes, on the follow-  
ing projects which were considered by  
the conferees, and are not included in  
this conference report. They are Cape  
Fear River Basin, N.C.; Flint River, Ga.;  
the South Fork of the Cumberland River,  
Ky., and Tenn.; Knowles Dam and Res-  
ervoir, Flathead River, Mont.; Burns  
Creek Dam and Reservoir, Snake River,  
Idaho; Waurika reclamation project,  
Oklahoma; Savannah River-Duke Power  
Co., South Carolina and Georgia; and  
Trotter's Shoal Reservoir, Savannah  
River.

Mr. President, I refer to page 48 of the  
conference report as presented to the  
House by Mr. DAVIS of Tennessee, a copy  
of which is on the desks of Senators, for  
the statement of the managers on the  
part of the House, as follows:

## EARLY HEARINGS

The managers on the part of the House  
made a commitment that the Committee on  
Public Works of the House would hold pub-  
lic hearings as soon as practicable after the  
next Congress convenes on the following  
projects which were considered by the con-  
ferees and which are not included in this

conference report: Cape Fear River Basin,  
N.C.; Flint River, Ga.; the South Fork of the  
Cumberland River, Ky. and Tenn.; Knowles  
Dam and Reservoir, Flathead River, Mont.;  
Burns Creek Dam and Reservoir, Snake  
River, Idaho; Waurika reclamation project,  
Oklahoma; Savannah River-Duke Power Co.,  
South Carolina and Georgia, and Trotter's  
Shoal Reservoir, Savannah River.

There will also need to be a considera-  
tion with respect to basin authorizations,  
and perhaps other projects will be avail-  
able for consideration by that time—  
early in 1963.

In that regard, the total cost of the  
projects contained in the bill as passed  
by the Senate, was \$3,692,200,800. With  
the reductions made, the conference re-  
port provides for a total monetary au-  
thorization of \$2,260,220,000, and would  
authorize some 207 projects.

The largest item taken out of the bill  
in the conference was the sum of  
\$900,300,000 from basin authorizations.  
However, with the exception of the Los  
Angeles River Basin, in California, there  
is enough remaining authorization from  
the Flood Control Act of 1960 to cover  
the appropriations made in the civil  
functions appropriation bill, 1962, for the  
fiscal year 1963.

With reference to the Los Angeles  
River Basin, the appropriation in the  
current civil functions bill exceeded the  
existing authorizations by \$3,700,000.  
Therefore, the only basin authorization  
contained in this bill is the \$3,700,000  
for the authorization required to cover  
the appropriations in the current ap-  
propriation bill for the Los Angeles  
River Basin.

The situation now is that before the  
Civil Functions Appropriation Act for  
1963 can be considered and enacted,  
to provide the necessary funds for the  
orderly continuation of the projects in  
the several basins, additional authoriza-  
tions will have to be made. It was the  
belief of the Senate committee—and  
it was approved by the Senate—that  
since it was so late in 1962, it would be  
the part of wisdom to include in this  
bill additional basin authorizations; and  
that was done to the extent of approx-  
imately \$900 million. That was one of  
the items—and the largest one—taken  
out of this bill in conference. It does  
not mean that the authorizations will  
not be passed. They will have to be  
passed next year, ahead of next year's  
civil functions appropriation bill.

However, the House conferees insisted  
that those basin authorizations be  
deleted from this bill; and that was  
when they gave the assurance that early  
in 1963 they would hold hearings and  
would initiate proceedings, early in the  
session of Congress next year, for the  
passage of legislation including not only  
the additional basin authorizations  
which were taken out of this bill, and  
which will be required next year, but  
also they agreed, as I have stated, to  
hold hearings on these additional proj-  
ects which were deleted from this bill.

Therefore, it is quite apparent that,  
while the conference committee reduced  
the amount provided in the bill from  
\$3,692,200,800 to \$2,260,000, the net  
result is that the difference between the  
two amounts will, of necessity, and in

accordance with the commitment of the  
members of the House Public Works  
Committee, be before the Congress for  
its consideration next year.

With that explanation, I ask for ap-  
proval of the conference report.

The ACTING PRESIDENT pro tem-  
pore. The question is on agreeing to the  
conference report.

Mr. COOPER. Mr. President, will the  
Senator yield?

Mr. KERR. I yield to the Senator  
from Kentucky.

Mr. COOPER. The Senator from  
Oklahoma referred to the agreement  
made by the House conferees that hear-  
ings would be held early next year upon  
various projects, including Devils Jump,  
which were not included in the bill re-  
ported by the conference. It was agreed  
also that these separate projects will be  
considered early next year in connec-  
tion with the river basin projects, and if  
approved will be included in an omnibus  
bill, which will be acted upon by the  
Congress in 1963.

Mr. KERR. In the same bill that  
would provide additional river basin au-  
thorizations; that is correct.

Mr. COOPER. I note that river basin  
projects are not referred to in the para-  
graph on page 48 captioned "Early hear-  
ings." I am sure it was an oversight.

Mr. KERR. The Senator from Okla-  
homa does not regard it as an oversight.  
I think it was by reason of the fact that  
the managers on the part of the House  
took it for granted that Senators and  
Members of the House of Representa-  
tives both knew existing authorizations  
were about exhausted, and that of neces-  
sity legislation would be required early  
next year for additional basin authori-  
zations. I think they had in mind to  
make clear and a matter of record their  
assurance that there would be hearings  
on the projects which were eliminated  
from the bill but which had been listed.

Mr. COOPER. I am sure that the  
Senator's description of the situation is  
correct. The projects listed in the state-  
ment of the House managers, and not  
included in the bill reported by the con-  
ference, if they should be approved by  
the House or Senate Public Works Com-  
mittee, would become part of the omni-  
bus bill which will have to be considered  
next year.

Mr. KERR. As the Senator from Ken-  
tucky is so well aware, because he spent  
so many days in the hearings of the  
committee, the projects which have been  
set forth in detail and which were de-  
leted from the bill were all fully justi-  
fied and shown to be worthy and meri-  
torious by the reports of the various Gov-  
ernment agencies—the Chief of Engi-  
neers, the Rivers and Harbors Board of  
the Corps of Engineers, the Bureau of  
Reclamation, and the Bureau of the  
Budget; and certainly they will be just  
as meritorious and worthy next year.

It will be the purpose of the Senator  
from Oklahoma, as chairman of the  
Subcommittee on Flood Control and  
Rivers and Harbors, along with other  
members of the subcommittee, including  
the Senator from Kentucky, who is the  
ranking Republican member, to hold  
hearings when the bill comes to be con-



sidered, and to include such projects in whatever authorization act we have next year.

Mr. COOPER. Let me say, on behalf of myself and the Senator from Hawaii [Mr. FONG], that we are very grateful to the Senator from Oklahoma [Mr. KERR] for his leadership—and to the chairman of the committee, the Senator from New Mexico [Mr. CHAVEZ]—as well as to the Senator from West Virginia [Mr. RANDOLPH] and the Senator from Michigan [Mr. McNAMARA], for their valiant labors during the conferences with the House to uphold to the very end the Senate version of the bill. They did all it was possible for them to do to secure its adoption, and we thank them.

Mr. JORDAN of North Carolina. Mr. President, will the Senator yield?

Mr. KERR. I yield to the Senator from North Carolina.

Mr. JORDAN of North Carolina. While we were very much disappointed that we did not get the Cape Fear project in the bill, I am very grateful to the Senator from Oklahoma for the fine work he and his colleagues did in obtaining an agreement with the House conferees to hold hearings on the project next year, so it may be included in another bill. I want to thank every one of the Senators for the fine service they rendered. I know what they were up against. Nobody could have done more than they did. I am deeply grateful to every member of the conference committee on the Senate side, and I have no quarrel with Members of the House who were in the conference, because they were under orders and they did all they could do.

I appreciate the courtesy extended to me in letting me come into the conference and explain the project I was interested in, with the hope that I might be of help. It was not very helpful, but I thank Senators for their courtesy. With the agreement that has been made, we have assurance that this project will be considered next year, when the hearings will be held, and it can be passed on then. It is a fine project.

I appreciate the fine work done by the Senator from Oklahoma, as well as the Senator from Michigan [Mr. McNAMARA], the Senator from West Virginia [Mr. RANDOLPH], the Senator from Kentucky [Mr. COOPER], and the Senator from Hawaii [Mr. FONG].

Mr. KERR. I am very grateful to the distinguished Senator from North Carolina. It was with the deepest regret that the Senate conferees receded on the Cape Fear River Basin project in North Carolina.

It had been approved by every Member of the North Carolina delegation in the House of Representatives except one. It had been vigorously fought for by the two great Members in the Senate from North Carolina. It had been approved by the Governor of North Carolina. It had been approved by the Chief of Engineers, the Board of Rivers and Harbors in the Corps of Engineers, and the Bureau of the Budget. It had a cost-benefit ratio of two and a half to one.

It developed that there was a road block in the form of a commitment in the Public Works Committee of the House to one member of the delegation in the House of Representatives from North Carolina that the project would not be accepted until further hearings had been held by the House Public Works Committee. The Senate conferees, not only with reference to this project, but with reference to the others that were deleted from the bill, were confronted with the simple proposition of accepting the position of the House and deleting those projects or not having a bill this year. So it was impossible to keep those projects in the bill. When we received assurances of the managers of the bill on the part of the House of Representatives, being the majority of the members of the subcommittee of the House committee handling rivers and harbors, that hearings would be held on these projects early next year, the Senate conferees reluctantly receded in order that there might be a bill to bring to this Chamber.

Mr. THURMOND. Mr. President, will the Senator yield?

Mr. KERR. I yield to the Senator from South Carolina.

Mr. THURMOND. Mr. President, I thank the distinguished Senator.

Mr. President, we, the citizens of South Carolina, are disappointed that the Duke project dam on the Savannah River, which had the approval of all the necessary Government agencies, which had been included in the House passed bill, and which also was included in the Senate passed bill, was deleted from the bill in conference.

I thank the distinguished Senator for the assurances he has given that early hearings will be held on this subject in January, or as soon thereafter as possible.

I ask unanimous consent to have printed in the RECORD, following the report by the chairman of the conference committee on the part of the Senate, which the Senator has made, the news release on this matter that I issued, dated October 12, 1962.

There being no objection, the news release was ordered to be printed in the RECORD, as follows:

STATEMENT BY SENATOR STROM THURMOND, OF SOUTH CAROLINA, ON RIVERS AND HARBORS AUTHORIZATION BILL, OCTOBER 12, 1962

I am disappointed that the conferees threw out the Duke Power project approval. It would cost the Government nothing. In fact, it would greatly benefit South Carolina and Georgia in both construction jobs and permanent employment. This \$280 million project by private enterprise would be the largest steam power generating plant in the world and would pay annual national taxes of approximately \$10 million, approximately \$7 million to the State and approximately \$1 million to Anderson County.

The conferees did give some indication that we might be able to win approval of the Duke project early next year. I will certainly work toward accomplishing this goal.

I was pleased that the conferees eliminated from the bill the Trotters Shoals project. It has been estimated that the cost would

be \$78.8 million, but as usual with power projects, the final cost could run to more than \$100 million. It would help create a desert for industrial development in the upper western part of South Carolina by eliminating many fine industrial sites. In fact, former Senator Charles E. Daniel says that at present this area provides some of the best industrial sites in this country.

While the Duke project had the approval of all necessary Government agencies, the Trotters Shoals project did not have such an approval.

In addition to all this, the Trotters Shoals project would block the construction of a \$50 to \$80 million paper plant operation near Calhoun Falls. In addition to the many jobs this plant would provide, its operations would result in greatly increasing the price of pulpwood in this area of South Carolina and Georgia where tree farming is the principal farming pursuit.

Mr. THURMOND. I also ask unanimous consent to have printed in the RECORD a statement by Mr. W. B. McGuire, president of Duke Power Co., before the Subcommittee on Flood Control of the Committee on Public Works of the House of Representatives in August 1962.

There being no objection, the statement was ordered to be printed in the RECORD, as follows:

STATEMENT OF W. B. MCGUIRE, PRESIDENT OF DUKE POWER CO., BEFORE THE SUBCOMMITTEE ON FLOOD CONTROL, COMMITTEE ON PUBLIC WORKS, U.S. HOUSE OF REPRESENTATIVES, AUGUST 1962, H.R. 6789

My name is W. B. McGuire. I live in Charlotte, N.C., and am president of Duke Power Co. Personally, and on behalf of my company, I wish to thank the committee for the opportunity of presenting some facts which I hope will assist the committee in its deliberations upon H.R. 6789 which is presently before you.

#### PURPOSE OF APPEARANCE

Duke Power Co. proposes to construct a steam-electric generating plant on the Savannah River, in the area of Middleton Shoals, between the Clark Hill and Hartwell Federal hydroelectric projects. In connection with this plant it will be necessary to build a diversion dam across the Savannah River, for which congressional approval must be obtained. It is through H.R. 6789, introduced by Congressman DORN, of South Carolina, in whose district the project would be built, that we seek this authorization. Our diversion dam across the river would be partly in Georgia in the district of Congressman STEPHENS, and we have kept him fully advised of our plans.

#### DUKE POWER CO.'S PROPOSED STEAMPLANT

Duke Power Co.'s proposed steamplant would be located on the northeast bank of the Savannah River in Anderson County, S.C., at river mile 296.7, about 8 miles below Hartwell Dam, and immediately upstream from the Sanders Ferry Bridge. The initial installation will contain two steam-electric generating units, each of at least 350,000 kilowatt capacity, but the site will be developed for the ultimate installed generating capacity of some 2 million kilowatts.

While there may be plants of this size in existence at the time of ultimate completion of Duke Power Co.'s plant, it is Duke's understanding that, today, a steam-electric generating plant of this capacity does not exist in the world. The following statistics with respect to this plant may be of interest:



	2,000,000-kilo- watt steam- plant	700,000-kilo- watt initial 2 units
Construction costs.....	\$280,000,000	\$91,000,000
Annual cost of operation and maintenance, including payroll but less fuel.....	\$2,500,000	\$1,150,000
Annual cost of fuel, including local railroad delivery.....	\$28,000,000	\$9,100,000
Annual local and State taxes, estimated on FPC basis.....	\$7,450,000	\$2,420,000
Annual Federal income taxes estimated on FPC basis.....	\$9,240,000	\$3,000,000
Installed capacity (kilowatts).....	2,000,000	700,000
Annual production (kilowatt-hours).....	10,000,000,000	3,500,000,000
Annual coal use (tons).....	3,500,000	1,220,000
Daily coal use (tons).....	9,500	3,300

While mentioning the economics of our plant, I would note for the committee, that the entire South Carolina congressional delegation—both Senate and House Members—support this legislation. The South Carolina General Assembly on February 8, 1962, adopted a concurrent resolution strongly supporting this project and memorializing the Congress to authorize its construction as soon as possible. In addition, the Governor of South Carolina and the South Carolina Development Board strongly support this bill.

#### NECESSITY FOR AND FUNCTION OF DAM

Steam-electric generating plants require large quantities of water for condensing steam. In connection with Duke Power's proposed plant, a diversion dam across the Savannah River is necessary to provide sufficient storage to regulate the nonuniform flows to be discharged from Hartwell hydroplant. Our dam will be a relatively low structure. It is a retaining wall only and will not be used to generate hydroelectric power. The pond created by this diversion dam will have a surface area of only 1,500 acres.

To condense the steam, river water will be drawn from the pond created by the diversion dam and will be returned to the river downstream from the dam. In passing through the condensers, the water's temperature will be raised some 13° to 18° F., depending upon operating conditions. After discharge from the powerhouse, the warmer water will, under the most adverse weather conditions, be cooled by natural processes to normal temperature by the time it travels a relatively short distance downstream from the steamplant.

In addition, the diversion dam will act as a thermal barrier to separate the intake and discharge points of the plant's cooling water system. Without this barrier, if a Government hydroelectric project is built in this stretch of the river, warm water discharged from the condensers would recirculate to the intake, be drawn into the plant, and reduce the plant's efficiency.

#### COMPARABILITY OF DUKE POWER'S PLANT WITH GOVERNMENT DEVELOPMENT

Several plans have been proposed for development of the stretch of the Savannah River between the Clark Hill and Hartwell projects. In 1959 the Army Engineers considered the construction of two projects, Carters Island and Goat Island. After re-study, the Army district engineer on February 9, 1962, recommended that a single project, Trotters Shoals, be built to impound the entire reach of the river between Clark Hill and Hartwell.

Duke has kept the Army Engineers advised of its plans for the Savannah River plant as they have developed, and has had numerous conferences with both the district engineer in Savannah and the division engineer in Atlanta.

If no Federal dam is built, Duke's proposed steam plant requires only a diversion dam with a crest at elevation 466 above mean sea level. However, in order to make its plant and the proposed Carters Island and Goat Island projects compatible, Duke advised the Army Engineers of its willingness

to construct its diversion dam to elevation 475.

When Trotters Shoals was proposed, Duke again met with the Army Engineers and reiterated its agreement to construct its dam to elevation 475, which is the elevation recommended by the Army Engineers for Trotters Shoals. Although this additional height on the Duke Dam is not needed for its project, Duke will assume this additional cost to achieve compatibility between its plant and Trotters Shoals, should Congress authorize the construction of Trotters Shoals.

#### TIME SCHEDULE OF CONSTRUCTION

Duke Power Co.'s construction program calls for initial operation of the first unit of 350,000 kilowatts of the Savannah River plant about July 1, 1967, with the second unit to commence operation about 1 year later. Further units will be added as needed to meet system requirements up to a maximum plant capacity of about 2 million kilowatts.

To begin operation on July 1, 1967, construction of the dam and steamplant must begin approximately 3 years earlier, about July 1, 1964. Before construction of the dam and plant can proceed, a railroad must be built to the site to bring in the necessary construction materials. This plant site can be served by more than one railroad. Construction of the railroad must begin on either March 1, 1963, or January 1, 1964, depending upon what railroad connection shall be built.

#### ARMY ENGINEERS HAVE NO OBJECTION TO BILL

H.R. 6789 is patterned after Public Law 68, enacted by the 80th Congress, 1st session, May 16, 1947, authorizing Duke Power Co. to construct a diversion dam across the Dan River in Rockingham County, N.C. H.R. 6789 was submitted to the Chief of Engineers in Washington, D.C., and contains the only suggestion made by the Chief of Engineers, which was the insertion in line 21, page 2, of the words "or downstream."

By letter of August 24, 1961, the Department of the Army advised the House Committee on Public Works that it had no objection to the passage of this bill, saying in part:

"It is considered that the proposed Duke Power Co. dam would not materially affect future development of the water resources of the stream as planned. In any event, the interests of the United States are protected by the provision in the bill requiring approval of plans by the Chief of Engineers and Secretary of the Army with such conditions as they deem necessary and the provision releasing the United States from all claims for damages by reason of any Federal project upstream or downstream from the proposed dam.

"The Department of the Army interposes no objection to the enactment of H.R. 6789."

The bill grants Duke authority to construct its plant on condition that its plans are approved by the Army Engineers and prohibits variance from the plans so approved except with approval of the Army Engineers.

#### DEPARTMENT OF INTERIOR VIEWS ON BILL

By letter of April 27, 1962, the Department of Interior presented to the committee its

views on H.R. 6789. The Department of Interior has made what seems to us to be a very unusual request. It is that they be given authority to approve plans for our structure. Historically the approval of plans for structures in navigable streams of the United States has always rested with the Army Engineers. We have checked this matter through the office of Congressman Dorn who introduced this bill. He advises us that he knows of no instance in which the Congress has granted to the Department of the Interior veto power over project plans. Congressman Dorn further advises us that he made inquiry of the counsel to this committee and your counsel knew of no such grant of authority.

We respectfully point out that were we to be required to obtain approval of our plans from both the Army Engineers and the Department of Interior, we would be placed in a most difficult position. Such dual approval would be quite time consuming and our time schedule is a tight one. But a much more serious problems stems from the fact that the Army Engineers and the Department of Interior may be in disagreement as to the type of structure we should build. The Army Engineers' report on the proposed Trotters Shoals Government dam calls for that project to be built to elevation 475 feet above mean sea level with no provision for pumped storage at Hartwell Dam. The Department of the Interior wants Trotters Shoals at 480 feet above mean sea level, with provision for pumped storage at Hartwell. These different views not only call for different heights for our structure, but a different design altogether. So long as this difference exists between the two agencies, if both must approve our plans, we are placed in an impossible situation. We respectfully urge this committee to leave the approval of plans for our project with the Army Engineers where this authority has heretofore resided.

#### FEDERAL POWER COMMISSION VIEWS ON BILL

By letter of May 18, 1962, the Federal Power Commission commented upon H.R. 6789 to the committee. H.R. 6789, as pending before the committee, contains a provision indemnifying the United States against damages to our structure by reason of any Federal development on the Savannah. This is the same form of indemnity clause enacted by the Congress in Public Law 68, 80th Congress, authorizing us to construct a similar dam for our Dan River plant in 1947. The Federal Power Commission, however, suggests an amendment which would give the Federal Power Commission or other authorized agencies power to require Duke Power Co. to remove its dam if it should ever interfere with any Federal development on the river. This to us seems a very harsh provision, especially when it is remembered that the Army Engineers have full control over the plans for our dam. To our knowledge, no such language has ever been enacted in an enabling act of the type we seek. The Federal Power Commission did not suggest such an amendment when it commented to the Congress upon our Dan River bill.

The Federal Power Commission's report to this committee cited legislation (61 Stat. 675) authorizing Pennsylvania Power & Light Co. to build a dam in the Susquehanna River as authority for the proposed FPC amendment to H.R. 6789. But that legislation was not authority for the proposed amendment because it did not require the removal of the Pennsylvania Power & Light dam.

It is doubtful that Duke Power Co. could borrow the millions of dollars we will need for our steamplant were the FPC amendment adopted. The bondholder's mortgage would be of little value against a steamplant which could be rendered useless by having its essential cooling-water dam destroyed.



It is no answer to say, as the FPC amendment suggests, that Duke Power Co. could utilize the reservoir which caused Duke's dam to be destroyed. We are sure that the committee can understand our fear of having a \$280 million plant located upon a reservoir over which we had absolutely no control. Such a reservoir might be drained for work on its dam or power facilities, leaving our steamplant without cooling water and, therefore, useless. In addition, the location of Duke's plant on the slack water of a reservoir after removal of Duke's dam would permit recirculation of the warm water discharged from the plant's condensers. This would substantially reduce both the efficiency and the capacity of Duke's steamplant.

When these factors are considered, we believe the committee will understand why we cannot undertake this project if the condition contained in the FPC amendment is imposed.

We would like to leave with the committee a memorandum covering the requested Federal Power Commission amendment. We urge the committee to conclude that this is a burdensome and unnecessary amendment, and that the indemnity clause contained in H.R. 6789, and previously enacted by the Congress in 1947 for our Dan River plant, is satisfactory.

#### WHY A DUKE POWERPLANT ON THE SAVANNAH RIVER?

Duke Power Co. has for many years planned the eventual location of one or more major generating plants on the Savannah River, and long ago purchased substantial areas of land on the river for this purpose. Over 2,200 acres of the company's land was condemned for the Clark Hill Federal project, and over 3,600 acres for the Hartwell project. On land remaining which it owns on the Savannah, the company now proposes constructing the above-mentioned steamplant. We own substantially all of the land necessary for our steamplant and its cooling water reservoir.

Duke's entire area is served by an integrated system of high-voltage transmission lines. The company is now in the process of completing a 230,000 volt trunk transmission line system throughout the area. Generation at any one point on the system is fed into this interconnecting transmission network and becomes a part of the combined total production which is used to supply the area. Generation by Duke on the Savannah River would be fed into this interconnected transmission system. In addition, it should be noted that our system will be interconnected with that of Georgia Power Co., and the generation from our Savannah River plant will also be a valuable backup to that company.

The southwestern part of the company's service area which is bounded by the Savannah River has been undergoing rapid industrial and population growth. This area includes Anderson and Greenville, S.C. Present annual energy requirements within the area are about 5.1 billion kilowatt-hours, and it is expected that by 1970 the requirement of the area will have doubled. Obviously, it is desirable that additional generating facilities be provided in this vicinity.

There is no other river in the southwestern portion of the Duke area having a streamflow sufficient to provide cooling water for the 2 million kilowatt steamplant Duke proposes for this area.

#### SUMMARY

In summary, Duke Power Co. calls special attention to the following aspects of its proposed plant:

1. The projected growth of the company's service area demands the location of a large steamplant in the lower end of its system, and the Savannah River is the only stream

capable of providing cooling water adequate for the size of the plant required in this portion of Duke's service area.

2. The proposed plant will be of tremendous economic benefit to the area, both in construction and operation. It will provide jobs for many during construction and a large annual payroll for operation; it will consume approximately 3.5 million tons of coal per year; it will produce a substantial volume of taxes for both Federal and local governments; and it will generate the large quantities of firm electric power which will be needed for the industrial development of the region. (This plant will support the system of Georgia Power Co., as well as Duke Power Co., through interconnections between the two companies.)

3. The proposed plant will not prevent the construction of the Trotters Shoals project presently proposed by the Army Engineers, should Congress decide to authorize it. For the purpose of avoiding conflict between the two projects, Duke Power Co., will be spending substantially more than its project would otherwise cost.

4. The entire South Carolina congressional delegation supports Duke's plant and H.R. 6789.

5. The plans for our plant must be approved in detail by the Army Engineers, who have traditionally controlled structures in navigable streams. The granting of similar approval authority to the Department of Interior is not necessary and would seriously delay, if not prevent, construction of Duke's plant.

6. The Federal Power Commission's suggested amendment requiring Duke to remove its dam under certain conditions is not necessary, has not been enacted heretofore, and would prevent construction of this plant.

We urge the committee to give H.R. 6789 a favorable report in its present form which has been approved by the Army Engineers.

Mr. RANDOLPH. Mr. President, will the Senator yield?

Mr. KERR. I yield to the Senator from West Virginia.

Mr. RANDOLPH. Mr. President, for the record it should be said that the chairman [Mr. KERR] of the conference committee on the part of the Senate has indicated that there was an agreement by the managers on the part of the House that the hearings on the eight projects which have been spelled out here today would be held early next year, possibly beginning in January. I think it is important to indicate that the Senator from Oklahoma requested this action on the part of the Public Works Committee in the House. That was not initiated by the managers on the part of the House, but came from the Senate request.

I believe it is factual to state to Senators who have an intense interest in certain projects that this was the desire and determination expressed by the Senator from Oklahoma [Mr. KERR], the chairman of the conferees on the part of the Senate. Others of us were privileged to work with him, to insist that the House hearings be held early next year. That was the agreement entered into after the initiative was taken by the Senator from Oklahoma.

There were 13 days of hearings in the Senate Subcommittee on Flood Control—Rivers and Harbors and approximately 100 hours of testimony was heard. Thorough consideration was given to these projects representing all sections

of the country. There are 17 members of the Committee on Public Works chaired by the experienced and effective Senator CHAVEZ. Our subcommittee consisted of the following: ROBERT S. KERR, chairman; PAT McNAMARA, JENNINGS RANDOLPH, STEPHEN M. YOUNG, EDMUND S. MUSKIE, FRANK E. MOSS, OREN E. LONG, BENJAMIN A. SMITH II, LEE METCALF, JOHN SHERMAN COOPER, HIRAM L. FONG, J. CALEB BOGGS, JACK R. MILLER, MAURICE J. MURPHY, Jr., and JAMES B. PEARSON.

Several of these men presided over hearings lasting 8 hours or longer. They were patient and helpful in moving the projects ahead, with the assistance of the committee staff, and witnesses.

It is timely also to stress that often, and mistakenly, such projects—almost 200 involved in this legislation—are referred to as "pork barrel" items. That is a misnomer. The citizens of our country should realize rather than pork barrel projects, that these are projects definitely in the public interest. They contribute to the national wealth, and strengthen the economic base of the country. They are dividend producing projects.

Mr. SPARKMAN. Mr. President, will the Senator yield?

Mr. KERR. I yield to the distinguished Senator from Alabama.

Mr. SPARKMAN. I have listened with a great deal of interest to the discussion of the conference report. I know something of the task involved in bringing about the settlement.

I have no interest individually in those projects which have been left out. I mean that they do not affect my State. I am interested, of course, as a citizen and as a Member of the U.S. Senate.

There is something which I think is a little ominous contained in the statement that the House conferees would not accept the projects because the House had not been able to hold hearings on the projects, and that therefore they were eliminated. It is true that we have been given a promise of early hearings next year.

My question is, are we moving gradually but surely into a position in which the Senate cannot initiate portions of legislation, based upon hearings the Senate holds? For instance, my understanding is that with respect to many of these projects, and perhaps all of them, the budget estimates were sent to Capitol Hill after the bill had passed the House, that those were before the Senate, and that the projects had been cleared.

Is the Senate to be barred from any initiative in legislative matters? Goodness knows, an apparent effort has been made to bar the Senate on appropriation matters from adding new items, and from taking an initiative on its own part. Is that to be extended to the legislative field? If so, I am concerned.

I know that often, in the legislative committees of which I am a member, new matters are considered by the committees. Sometimes the Senate committees initiate and the Senate passes legislation which goes to the other body,



and the committee in the other body adds new material to the proposed legislation after hearings held there. Does that mean we have a right to object to that process, because the Senate has not held hearings?

My answer to the question, of course, is in the negative. By the same token, I do not believe that the House of Representatives has the right to say that the Senate cannot add projects to legislation already passed by the House simply because the House has not held hearings on those particular projects.

I wish to lodge one protest against any such understanding as that, and I think the RECORD ought to show clearly that it is not our intention that that should become a precedent which would rule in the future.

I thank the Senator for yielding.

The ACTING PRESIDENT pro tempore. The question is on agreeing to the conference report.

The report was agreed to.

Mr. KERR. Mr. President, I move to reconsider the vote by which the conference report was agreed to.

Mr. JORDAN of North Carolina. Mr. President, I move to lay that motion on the table.

The ACTING PRESIDENT pro tempore. The question is on agreeing to the motion to lay on the table the motion to reconsider.

The motion to lay on the table was agreed to.

Mr. KERR. Mr. President, with reference to the remarks by the distinguished Senator from Alabama, for which I am grateful, because they call to mind a matter about which considerable has been said and much more thought, I wish to say that the Senate added to the bill about 44 projects or items relating to projects. There were some three projects added in the action by the Senate. Of these thus added by the Senate, about 37 were kept in conference. Therefore, I say to my good friend that the Senate had a good deal to say about what went into the bill.

In addition, we added provisions in the bill concerning a new method of approach on beach erosion. We added a new method of approach on implementation of recreation. A very significant provision was added by the Senate Committee on Public Works in connection with the handling by the Bureau of Reclamation of the replacement of highways in multiple-purpose projects or water resources projects.

The distinguished Senator will remember that in 1960, the Senate added provisions to the omnibus rivers and harbors and flood control bill which allows a new formula for the Corps of Engineers as to the replacement of highways in multiple-purpose projects and water retention reservoirs. Under previous procedures, which was more administrative than legislative, the Corps of Engineers, in the replacement of highway facilities, would allow only enough money to replace the existing highway facility in kind; that is, to the same specifications as the existing roads.

We all know that these reservoirs are built in areas where sometimes the high-

ways are 10, 15, 20, 30, and 40 years old. When these roads were built, they were built in accordance with the standards of those days and more adequate to accommodate traffic of those days. But in 1960 we provided that the Corps of Engineers could pay the cost of their building of the new highways so that they would be of standards adequate to accommodate present day traffic needs. Through an oversight we did not make that rule applicable to the roads replaced by the Bureau of Reclamation in connection with reclamation projects. That situation was corrected in the bill, and the same provision added for that Bureau. There were additional provisions which related to emergency flood control work small flood control projects and measures which will be of great help in developing our water resources projects. I wish to pay special tribute to our great chairman, the Senator from New Mexico [Mr. CHAVEZ], who provided so much leadership in the development of the proposed legislation, and the wonderful staff of the committee, which spent many weeks preparing for hearings and assisting in the 13 days of hearings that the Public Works Committee had on the proposed legislation.

I pay special tribute to the members of the committee who worked, in the busiest time of the present session, long hours of the day, including Saturdays, to get the bill ready to bring to the Senate; and to Senators who served on the conference with the Senator from Oklahoma, including the Senator from Michigan [Mr. McNAMARA], the Senator from West Virginia [Mr. RANDOLPH], the Senator from Kentucky [Mr. COOPER], and the Senator from Hawaii [Mr. FONG]. Their service was faithful, devoted, and of great help and benefit.

In connection with the hearings, the present Presiding Officer [Mr. METCALF in the chair] spent many days in conducting the hearings, as did also the Senator from West Randolph [Mr. RANDOLPH], the Senator from Ohio [Mr. YOUNG], and the Senator from Michigan [Mr. McNAMARA].

Mr. President, I wish to pay tribute to the chairman of the House Rules Committee—a very great, honorable, and highly respected gentleman.

The proposed legislation passed the House and then the Senate very late in the session, with certain differences. The measure went back to the House. It was apparent that if we were to accommodate our differences and have a bill, a conference would be necessary.

The Senator from Oklahoma made the statement about the distinguished chairman of the Rules Committee and about the Senator from Oklahoma that they were a couple of tough and rugged characters. They were stubborn and of very positive convictions and thinking. But I respect stubbornness. I respect positive convictions. The distinguished Representative from Virginia, Mr. HOWARD SMITH, is one of the great public servants of this period in our history. I hope he lives long and continues in the service of his country.

I do not agree with him on a number of things. By the same token, he does

not agree with me on a number of things.

Such differences do not reduce my respect—indeed, my esteem and affection—for him. But I wish to remind Senators that due to the amount of influence or the position that the distinguished chairman of the Rules Committee has, he could have, for a considerable number of days, either prevented a rule being given that could result in a conference or certainly create delay. But he agreed to the Rules Committee giving a rule and, as Senators know, after that was done he could have put it in his pocket for 10 days if he had wanted to. Determined as he was to bring about certain results, he still recognized the propriety and the wisdom of permitting the legislative process to have its way and in having a conference.

The Senator from Oklahoma does not blame him for having called the House conferees in before he gave that rule and asked them if they would stand firm in reference to certain projects in the bill. If the Senator from Oklahoma had had the positive convictions that the chairman of the Rules Committee did about these things, he probably would have tried in some way—which perhaps would not have been as apparent or as highly publicized—to have gained his objective. But if the Senator from Oklahoma had felt positive enough about it and had arrived at the conclusion that the only way to accomplish his objective was the way in which the distinguished Representative from Virginia did it, he might have done the same thing.

But I wish to say to his credit that he made it possible this week for us to have a conference, which ended yesterday.

I see by my calendar that yesterday was Friday, October 12, which was an historic day, Mr. President. It was the anniversary of the discovery of America by Christopher Columbus. That was a more important event than a successful determination of the conference. But I wish to say that the conference termination and accomplishment was of great significance and enhanced Columbus Day. It certainly did nothing to cast any eclipse or darkness upon it.

Therefore, Mr. President, I am deeply indebted, as I believe the Senate is, to the chairman of the committee, the members of the staff, the House conferees, the leadership of the House and the Senate, and to the great Representative from Virginia, Judge HOWARD SMITH.

#### PUBLIC WORKS APPROPRIATION BILL, 1963—CONFERENCE REPORT

Mr. RUSSELL. Mr. President, I submit a report of the committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H.R. 12900) making appropriations for certain civil functions administered by the Department of Defense, certain agencies of the Department of the Interior, the Atomic Energy Commission, the St. Lawrence Seaway Development Corporation, the Tennessee Valley Authority, and certain river basin commissions, for the fiscal year ending











## An Act

76 STAT. 1173.

Authorizing the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

### TITLE I—RIVERS AND HARBORS

River and Harbor  
Act of 1962.

SEC. 101. That the following works of improvement of rivers and harbors and other waterways for navigation, flood control, and other purposes are hereby adopted and authorized to be prosecuted under the direction of the Secretary of the Army and supervision of the Chief of Engineers, in accordance with the plans and subject to the conditions recommended by the Chief of Engineers in the respective reports hereinafter designated: *Provided*, That the provisions of section 1 of the River and Harbor Act approved March 2, 1945 (Public Law Numbered 14, Seventy-ninth Congress, first session), shall govern with respect to projects authorized in this title; and the procedures therein set forth with respect to plans, proposals, or reports for works of improvement for navigation or flood control and for irrigation and purposes incidental thereto, shall apply as if herein set forth in full:

59 Stat. 10.

#### NAVIGATION

Narraguagus River, Maine: House Document Numbered 530, Eighty-seventh Congress, at an estimated cost of \$500,000; Maine.

Carvers Harbor, Vinalhaven, Maine: Senate Document Numbered 118, Eighty-seventh Congress, at an estimated cost of \$205,000;

Searsport Harbor, Maine: House Document Numbered 500, Eighty-seventh Congress, at an estimated cost of \$700,000;

Portland Harbor, Maine: House Document Numbered 216, Eighty-seventh Congress, at an estimated cost of \$8,340,000;

Kennebunk River, Maine: House Document Numbered 459, Eighty-seventh Congress, at an estimated cost of \$270,000;

Portsmouth Harbor and Piscataqua River, Maine and New Hampshire: House Document Numbered 482, Eighty-seventh Congress, at an estimated cost of \$7,500,000; New Hampshire.

Gloucester Harbor, Massachusetts: House Document Numbered 341, Eighty-seventh Congress, at an estimated cost of \$1,100,000; Massachusetts.

Marblehead Harbor, Massachusetts: House Document Numbered 516, Eighty-seventh Congress, at an estimated cost of \$1,752,000;

Chelsea Harbor, Massachusetts: House Document Numbered 350, Eighty-seventh Congress, at an estimated cost of \$2,843,000;

Dorchester Bay and Neponset River, Massachusetts: Senate Document Numbered 126, Eighty-seventh Congress, at an estimated cost of \$7,050,000;

Plymouth Harbor, Massachusetts: Senate Document Numbered 124, Eighty-seventh Congress, at an estimated cost of \$1,200,000;

Pawtuxet Cove, Rhode Island: House Document Numbered 236, Eighty-seventh Congress, at an estimated cost of \$210,000; Rhode Island.

Great Lakes to Hudson River Waterway, New York: River and Harbor Committee Document Numbered 20, Seventy-third Congress, for the further partial accomplishment of the approved plan there is hereby authorized to be appropriated, in addition to sums previously authorized, \$1,000,000; New York.

Little Neck Bay, New York: House Document Numbered 510, Eighty-seventh Congress, at an estimated cost of \$2,185,000;

- Flushing Bay and Creek, New York: House Document Numbered 551, Eighty-seventh Congress, at an estimated cost of \$1,695,000;
- Buttermilk Channel, New York: House Document Numbered 483, Eighty-seventh Congress, at an estimated cost of \$2,226,000;
- New Jersey. Newark Bay, Hackensack and Passaic Rivers, New Jersey (channels to Port Elizabeth): Modification of the existing navigation project authorized by the River and Harbor Act of 1954 (Public Law 780, Eighty-third Congress), House Document Numbered 252, is hereby authorized substantially in accordance with the plans being prepared by the Chief of Engineers, subject to the approval of such plans by the Secretary of the Army and the President;
- 68 Stat. 1248,  
1249. Raritan River, New Jersey: House Document Numbered 455, Eighty-sixth Congress, maintenance;
- Virginia. Lynnhaven Inlet, Bay, and connecting waters, Virginia: House Document Numbered 580, Eighty-seventh Congress, at an estimated cost of \$1,068,000: *Provided*, That nothing in this Act shall be construed as authorizing reimbursement to local interests for the Long Creek-Broad Bay Canal Bridge;
- James River, Virginia: House Document Numbered 586, Eighty-seventh Congress, at an estimated cost of \$39,000,000: *Provided*, That this authorization shall expire after a period of five years from the date of approval of this Act unless the Governor of Virginia has endorsed the project within that time: *And provided further*, That prior to construction, there will be submitted to the Congress a feasibility report which takes account of possible adverse effects of the project on seed oyster production;
- Report to Congress. Rollinson Channel and channel from Hatteras Inlet to Hatteras, North Carolina: House Document Numbered 457, Eighty-seventh Congress, at an estimated cost of \$652,000;
- North Carolina. Wilmington Harbor, North Carolina: Senate Document Numbered 114, Eighty-seventh Congress, at an estimated cost of \$6,370,000;
- Georgia. Savannah Harbor, Georgia: Senate Document Numbered 115, Eighty-seventh Congress, at an estimated cost of \$605,000;
- Florida. Canaveral Harbor, Florida: Senate Document Numbered 140, Eighty-seventh Congress, at the estimated cost of \$5,076,000;
- Key West Harbor, Florida: Senate Document Numbered 106, Eighty-seventh Congress, at an estimated cost of \$820,000;
- Tampa Harbor, Port Sutton and Ybor Channels, Florida: House Document Numbered 529, Eighty-seventh Congress, at an estimated cost of \$997,000;
- Pensacola Harbor, Florida: House Document Numbered 528, Eighty-seventh Congress, at an estimated cost of \$424,000;
- Alabama. Walter F. George lock and dam, Alabama: Senate Document Numbered 109, Eighty-seventh Congress, at an estimated cost of \$500,000;
- Holt lock and dam, Alabama: The Secretary of the Army is hereby authorized and directed to cause an immediate study to be made under the direction of the Chief of Engineers with a view to providing hydroelectric power generating facilities in said dam, and his report on such study shall be submitted to the Congress by the Secretary of the Army within the first period of sixty calendar days of continuous session of the Eighty-eighth Congress;
- Report to Congress. Pascagoula Harbor, Mississippi: House Document Numbered 560, Eighty-seventh Congress, at an estimated cost of \$4,870,000;
- Mississippi. Mississippi River, Baton Rouge to Gulf of Mexico, Louisiana: Senate Document Numbered 36, Eighty-seventh Congress, at an estimated cost of \$357,000;
- Louisiana. The project, Mississippi River, Baton Rouge to the Gulf of Mexico, barge channel through Devils Swamp, Louisiana (Baton Rouge Harbor), authorized by the River and Harbor Act of 1946, in accord-
- 60 Stat. 635.



ance with the recommendations of the Chief of Engineers in House Document Numbered 321, Eightieth Congress, as amended by the Flood Control Act of 1948, is hereby further amended to provide for the provision as required, of suitable dikes and other retaining structures at a Federal cost of \$299,500, for the construction and future maintenance of the project, in order to provide additional industrial sites with water frontage which are now needed to permit the normal development and expansion of the industrial and commercial activities of the locality: *Provided*, That local interests contribute the sum of \$100,500 toward the cost of the work;

62 Stat. 1179.

Bayous Terrebonne, Petit Caillou, Grand Caillou, Du Large, and connecting channels, Louisiana, and Atchafalaya River, Morgan City to Gulf of Mexico: House Document Numbered 583, Eighty-seventh Congress, at an estimated cost of \$45,000;

Gulf Intracoastal Waterway, Louisiana and Texas: House Document Numbered 556, Eighty-seventh Congress, at an estimated cost of \$25,540,000: *Provided*, That the authority to make such modifications as in the discretion of the Chief of Engineers may be advisable, as set forth in House Document Numbered 556, Eighty-seventh Congress, shall be interpreted to apply to, but not limited to, the improvement of the existing channels at proposed channel relocation sites in lieu of such relocations;

Louisiana and Texas.

Calcasieu River salt water barrier, Louisiana: House Document Numbered 582, Eighty-seventh Congress, at an estimated cost of \$3,310,000: *Provided*, That the Corps of Engineers is directed to study the question of cost sharing taking into account that measures for mitigation of damages from navigation improvements will be a Federal responsibility and enhancement effects will be shared on the basis of a 50 per centum Federal and 50 per centum non-Federal; such cost sharing is hereby authorized as determined to be feasible and justified by the Chief of Engineers and Secretary of the Army within the first period of sixty calendar days of continuous session of the Congress after the date on which the report is submitted to it unless such report is disapproved by the Congress;

Report to Congress.

Mississippi River at Clarksville, Missouri: House Document Numbered 552, Eighty-seventh Congress, at an estimated cost of \$103,300;

Missouri.

Sandy Slough, Lincoln County, Missouri: House Document Numbered 419, Eighty-seventh Congress, at an estimated cost of \$195,000;

Sabine-Neches Waterway, Texas: House Document Numbered 553, Eighty-seventh Congress, at an estimated cost of \$20,830,000;

Texas.

Trinity River, Wallisville Reservoir, Texas: House Document Numbered 215, Eighty-seventh Congress, at an estimated cost of \$9,162,000: *Provided*, That nothing in this Act shall be construed as authorizing the acquisition of additional lands for establishment of a national wildlife refuge at the reservoir;

Gulf Intracoastal Waterway, channel to Palacios, Texas: House Document Numbered 504, Eighty-seventh Congress, at an estimated cost of \$818,000;

Gulf Intracoastal Waterway, channel to Victoria, Texas: House Document Numbered 288, Eighty-seventh Congress, at an estimated cost of \$1,590,000;

Illinois Waterway, Illinois and Indiana: House Document Numbered 31, Eighty-sixth Congress, is approved and there is hereby authorized the sum of \$40,000,000 for initiation and partial accomplishment of the project;

Illinois and Louisiana.

Kaskaskia River, Illinois: Senate Document Numbered 44, Eighty-seventh Congress, at an estimated cost of \$58,200,000;

Mississippi River between Missouri River and Minneapolis, Minnesota: House Document Numbered 513, Eighty-seventh Congress, at an estimated cost of \$1,205,000;

Minnesota.

- Michigan. Ontonagon Harbor, Michigan: House Document Numbered 287, Eighty-seventh Congress, at an estimated cost of \$4,741,000;  
Muskegon Harbor, Michigan: House Document Numbered 474, Eighty-seventh Congress, at an estimated cost of \$609,000;  
Leland Harbor, Michigan: House Document Numbered 413, Eighty-seventh Congress, at an estimated cost of \$485,000;  
Little Bay De Noc, Gladstone Harbor and Kipling, Michigan: House Document Numbered 480, Eighty-seventh Congress, at an estimated cost of \$350,000;
- Wisconsin. Green Bay Harbor, Wisconsin: House Document Numbered 470, Eighty-seventh Congress, at an estimated cost of \$4,270,000;  
Kenosha Harbor, Wisconsin: House Document Numbered 496, Eighty-seventh Congress, at an estimated cost of \$673,000;  
Manitowoc Harbor, Wisconsin: House Document Numbered 479, Eighty-seventh Congress, at an estimated cost of \$719,000;  
Milwaukee Harbor, Wisconsin: House Document Numbered 134, Eighty-seventh Congress, at an estimated cost of \$4,029,000;
- Illinois. Chicago Harbor, Illinois: House Document Numbered 485, Eighty-seventh Congress, at an estimated cost of \$1,505,000;
- Indiana. Calumet Harbor and River, Illinois and Indiana: House Document Numbered 581, Eighty-seventh Congress, at an estimated cost of \$11,464,000;
- Michigan. New Buffalo Harbor, Michigan: House Document Numbered 481, Eighty-seventh Congress, at an estimated cost of \$667,000;  
Caseville Harbor, Michigan: House Document Numbered 64, Eighty-seventh Congress, at an estimated cost of \$327,000;  
Saginaw River, Michigan: House Document Numbered 544, Eighty-seventh Congress, at an estimated cost of \$4,780,000;  
Rouge River, Michigan: House Document Numbered 509, Eighty-seventh Congress, at an estimated cost of \$257,000;
- Ohio. Huron Harbor, Ohio: House Document Numbered 165, Eighty-seventh Congress, at an estimated cost of \$8,557,000;  
Cleveland Harbor, Ohio: House Document Numbered 527, Eighty-seventh Congress, at an estimated cost of \$888,000;  
Conneaut Harbor, Ohio: House Document Numbered 415, Eighty-seventh Congress, at an estimated cost of \$6,179,000;
- Pennsylvania. Erie Harbor, Pennsylvania: House Document Numbered 340, Eighty-seventh Congress, at an estimated cost of \$671,000;
- New York. Buffalo Harbor, New York: House Document Numbered 451, Eighty-seventh Congress, at an estimated cost of \$2,797,000;  
Great Sodus Bay Harbor, New York: House Document Numbered 138, Eighty-seventh Congress, at an estimated cost of \$765,000;  
Oswego Harbor, New York: House Document Numbered 471, Eighty-seventh Congress, at an estimated cost of \$1,180,000;
- California. Dana Point Harbor, California: House Document Numbered 532, Eighty-seventh Congress, at an estimated cost of \$3,730,000;  
Santa Barbara Harbor, California: House Document Numbered 518, Eighty-seventh Congress, at an estimated cost of \$3,000,000;  
Oakland Harbor, California, Fruitvale Avenue Bridge: Senate Document Numbered 75, Eighty-seventh Congress, at an estimated cost of \$1,750,000;  
Oakland Harbor, California: House Document Numbered 353, Eighty-seventh Congress, at an estimated cost of \$6,775,000;  
Noyo River and Harbor, California: Senate Document Numbered 121, Eighty-seventh Congress, at an estimated cost of \$13,231,000;
- Oregon and Washington. Columbia and Lower Willamette Rivers, Oregon and Washington: House Document Numbered 203, Eighty-seventh Congress, at an estimated cost of \$493,000;



Columbia and Lower Willamette Rivers below Vancouver, Washington, and Portland, Oregon: House Document Numbered 452, Eighty-seventh Congress, at an estimated cost of \$20,100,000;

Washington and Oregon.

Tacoma Harbor, Port Industrial and Hylebos Waterways, Washington: Senate Document Numbered 104, Eighty-seventh Congress, at an estimated cost of \$2,460,000;

Kingston Harbor, Washington: House Document Numbered 417, Eighty-seventh Congress, at an estimated cost of \$428,000;

Swinomish Channel, Washington: House Document Numbered 499, Eighty-seventh Congress, at an estimated cost of \$887,000;

Kaunakakai Harbor, Molokai, Hawaii: House Document Numbered 484, Eighty-seventh Congress, at an estimated cost of \$7,919,000;

Hawaii.

The project for Hilo Harbor, Hawaii, authorized by Public Law 645, Eighty-sixth Congress, is hereby modified to provide for adjustment of the cash contribution required of local interest in accordance with recommendations by the Secretary of the Army and approved by the President, such adjustment to be made at the earliest practicable date.

74 Stat. 483.

#### BEACH EROSION

State of New Hampshire: House Document Numbered 416, Eighty-seventh Congress, at an estimated cost of \$88,000;

New Hampshire.

Fire Island Inlet and shore westerly to Jones Inlet, Long Island, New York: Modification of the existing beach erosion control project authorized by the River and Harbor Act of 1958 (Public Law 500, Eighty-fifth Congress), House Document Numbered 411, Eighty-fifth Congress, is hereby authorized substantially in accordance with the plans, which will include a sand bypassing system at Fire Island Inlet, being prepared by the Chief of Engineers, subject to the approval of such plans by the Secretary of the Army and the President;

New York.

72 Stat. 299.

Clark Point, New Bedford, Massachusetts: House Document Numbered 584, Eighty-seventh Congress, at an estimated cost of \$60,000;

Massachusetts.

Virginia Beach, Virginia: House Document Numbered 382, Eighty-seventh Congress, periodic nourishment;

Virginia.

Fort Macon, Atlantic Beach and vicinity, North Carolina: House Document Numbered 555, Eighty-seventh Congress, at an estimated cost of \$194,000;

North Carolina.

Palm Beach County from Martin County line to Lake Worth Inlet and from South Lake Worth Inlet to Broward County line, Florida: House Document Numbered 164, Eighty-seventh Congress, at an estimated cost of \$128,800;

Florida.

Virginia Key and Key Biscayne, Florida: House Document Numbered 561, Eighty-seventh Congress, at an estimated cost of \$220,000;

San Juan and vicinity, Puerto Rico: House Document Numbered 575, Eighty-seventh Congress, at an estimated cost of \$65,400;

Puerto Rico.

Lake Erie shoreline from the Michigan-Ohio State line to Marblehead, Ohio: House Document Numbered 63, Eighty-seventh Congress, at an estimated cost of \$658,500;

Michigan-Ohio.

Sheffield Lake community park, Sheffield Lake Village, Ohio: House Document Numbered 414, Eighty-seventh Congress, at an estimated cost of \$100,300;

Ventura-Pierpont area, California: House Document Numbered 458, Eighty-seventh Congress, at an estimated cost of \$515,000.

California.

Orange County, California, House Document Numbered 602, Eighty-seventh Congress, at an estimated cost of \$2,845,000.

SEC. 102. That the Secretary of the Army is hereby authorized to reimburse local interests for such work done by them on the beach erosion projects authorized in section 101, and in other sections of this Act, subsequent to the initiation of the cooperative studies which form

Reimbursement of local interests.

the basis for the projects: *Provided*, That the work which may have been done on these projects is approved by the Chief of Engineers as being in accordance with the projects herein adopted: *Provided further*, That such reimbursement shall be subject to appropriations applicable thereto or funds available therefor and shall not take precedence over other pending projects of higher priority for improvements.

Protection of  
shores.  
70 Stat. 702.

SEC. 103. (a) The Act approved August 13, 1946, as amended by the Act approved July 28, 1956 (33 U.S.C. 426e-h), pertaining to shore protection, is hereby further amended as follows:

(1) the word "one-third" in section 1(b) is deleted and the word "one-half" is substituted therefor;

(2) the following is added after the word "located" in section 1(b): "except that the costs allocated to the restoration and protection of Federal property shall be borne fully by the Federal Government, and, further, that Federal participation in the cost of a project for restoration and protection of State, county, and other publicly owned shore parks and conservation areas may be, in the discretion of the Chief of Engineers, not more than 70 per centum of the total cost exclusive of land costs, when such areas Include a zone which excludes permanent human habitation; include but are not limited to recreational beaches; satisfy adequate criteria for conservation and development of the natural resources of the environment; extend landward a sufficient distance to include, where appropriate, protective dunes, bluffs, or other natural features which serve to protect the uplands from damage; and provide essentially full park facilities for appropriate public use, all of which shall meet with the approval of the Chief of Engineers";

(3) the following is added after the word "supplemented" in section 1(e): "or, in the case of a small project under section 3 of this Act, unless the plan therefor has been approved by the Chief of Engineers"; and

(4) sections 2 and 3 are amended to read as follows:

Reimbursement.

"SEC. 2. The Secretary of the Army is hereby authorized to reimburse local interests for work done by them, after initiation of the survey studies which form the basis for the project, on authorized projects which individually do not exceed \$1,000,000 in total cost: *Provided*, That the work which may have been done on the projects is approved by the Chief of Engineers as being in accordance with the authorized projects: *Provided further*, That such reimbursement shall be subject to appropriations applicable thereto or funds available therefor and shall not take precedence over other pending projects of higher priority for improvements.

Small construction projects,  
authorization.

"SEC. 3. The Secretary of the Army is hereby authorized to undertake construction of small shore and beach restoration and protection projects not specifically authorized by Congress, which otherwise comply with section 1 of this Act, when he finds that such work is advisable, and he is further authorized to allot from any appropriations hereafter made for civil works, not to exceed \$3,000,000 for any one fiscal year for the Federal share of the costs of construction of such projects: *Provided*, That not more than \$400,000 shall be allotted for this purpose for any single project and the total amount allotted shall be sufficient to complete the Federal participation in the project under this section including periodic nourishment as provided for under section 1(c) of this Act: *Provided further*, That the provisions of local cooperation specified in section 1 of this Act shall apply: *And provided further*, That the work shall be complete in itself and shall not commit the United States to any additional improvement to



insure its successful operation, except for participation in periodic beach nourishment in accordance with section 1(c) of this Act, and as may result from the normal procedure applying to projects authorized after submission of survey reports."

(b) All provisions of existing law relating to surveys of rivers and harbors shall apply to surveys relating to shore protection and section 2 of the River and Harbor Act approved July 3, 1930, as amended (33 U.S.C. 426), is modified to the extent inconsistent herewith.

(c) The cost-sharing provisions of this Act shall apply in determining the amounts of Federal participation in or payments toward the costs of authorized projects which have not been substantially completed prior to the date of approval of this Act, and the Chief of Engineers, through the Beach Erosion Board, is authorized and directed to recompute the amounts of Federal contribution toward the costs of such projects accordingly.

SEC. 104. The project for aquatic plant control authorized by the River and Harbor Act of 1958 (72 Stat. 297, 300) is hereby modified to provide that research costs and planning costs prior to construction shall be borne fully by the United States and shall not be included in the cost to be shared by local interests.

SEC. 105. The Secretary of the Army is authorized to convey 17.94 acres of land located at old lock and dam numbered 7, Ohio River, to the city of Midland, Pennsylvania, after November 1, 1962, for public park and recreation purposes, without monetary consideration but subject to reversion to the United States if not utilized for public park and recreation purposes and further subject to such flowage rights as may be necessary in the operation of the New Cumberland lock and dam, Ohio River.

SEC. 106. Section 110(f) of the River and Harbor Act of 1958 (72 Stat. 297) is amended by changing the period to a comma and adding the following: "and upon completion of transfer to the said State of all right, title, and interest of the United States in and to the canal in accordance with the agreement executed December 14, 1960, between the Chief of Engineers and the representatives of said State, the additional sum of \$800,000 is hereby authorized to be appropriated to be expended by the Corps of Engineers, or by said State, for the repair and modification of any canal properties and appurtenances, notwithstanding the provisions of section 110(b) hereof."

SEC. 107. The Secretary of the Army is authorized and directed to prepare and transmit to Congress, at the earliest practicable date, a compilation of survey and review reports on river and harbor and flood control improvements, similar to that prepared in accordance with the Act of March 4, 1913, revised in accordance with the Acts of July 3, 1930, August 30, 1935, and May 17, 1950, and printed in House Document Numbered 214, Eighty-second Congress, first session.

SEC. 108. The Chief of Engineers is authorized to perform such work as may be necessary to provide for the repair and restoration of lock and dam numbered 3 on the Big Sandy River: *Provided*, That the work authorized herein shall have no effect on the condition that local interests shall operate and maintain the structure and related properties as required by the Act of Congress approved August 6, 1956 (70 Stat. 1062): *And provided further*, That there is hereby authorized to be expended from appropriations hereafter made for civil functions administered by the Department of the Army, such funds as may be necessary for the repair and restoration of lock and dam numbered 3 on the Big Sandy River, not to exceed \$200,000.

SEC. 109. The body of water designated as the Redondo Beach Harbor, California, shall be known and designated hereafter as the Redondo Beach King Harbor, California. Any law, regulation, map,

46 Stat. 945.  
Project costs.

Aquatic plant  
control project,  
modification.

Midland, Pa.  
Land conveyance.

Illinois and  
Mississippi  
Canal.  
Additional  
funds.

River and harbor  
survey reports.

37 Stat. 827;  
46 Stat. 949;  
49 Stat. 1049;  
64 Stat. 168.

Big Sandy River,  
Ky.

Redondo Beach  
King Harbor,  
Calif.  
Designation.

document, record, or other paper of the United States in which such body of water is referred to shall be held to refer to it as the Redondo Beach King Harbor, California.

Surveys.

SEC. 110. The Secretary of the Army is hereby authorized and directed to cause surveys to be made at the following named localities and subject to all applicable provisions of section 110 of the River and Harbor Act of 1950:

64 Stat. 168.

Falmouth Harbor, Maine.  
Channel between Point Shirley and Deer Island, Massachusetts.  
Little Egg Inlet, New Jersey.  
Brigantine Inlet, New Jersey.  
Corsons Inlet, New Jersey.  
Kings Bay Deepwater Channel, Georgia.  
Auglaize River at Wapakoneta, Ohio.

Coastal areas.

Surveys of the coastal areas of the United States and its possessions, including the shores of the Great Lakes, in the interest of beach erosion control, hurricane protection and related purposes: *Provided*, That surveys of particular areas shall be authorized by appropriate resolutions of either the Committee on Public Works of the United States Senate or the Committee on Public Works of the House of Representatives.

Citation of title.

SEC. 111. Title I of this Act may be cited as the "River and Harbor Act of 1962".

## TITLE II—FLOOD CONTROL

49 Stat. 1571.  
33 USC 701c.  
52 Stat. 1215.  
33 USC 701c-1.

SEC. 201. Section 3 of the Act approved June 22, 1936 (Public Law Numbered 738, Seventy-fourth Congress), as amended by section 2 of the Act approved June 28, 1938 (Public Law Numbered 761, Seventy-fifth Congress), shall apply to all works authorized in this title except that for any channel improvement or channel rectification project, provisions (a), (b), and (c) of section 3 of said Act of June 22, 1936, shall apply thereto, and except as otherwise provided by law: *Provided*, That the authorization for any flood control project herein adopted requiring local cooperation shall expire five years from the date on which local interests are notified in writing by the Department of the Army of the requirements of local cooperation, unless said interests shall within said time furnish assurances satisfactory to the Secretary of the Army that the required cooperation will be furnished.

58 Stat. 887.  
33 USC 701-1.

SEC. 202. The provisions of section 1 of the Act of December 22, 1944 (Public Law Numbered 534, Seventy-eighth Congress, second session), shall govern with respect to projects authorized in this Act, and the procedures therein set forth with respect to plans, proposals, or reports for works of improvement for navigation or flood control and for irrigation and purposes incidental thereto shall apply as if herein set forth in full.

Navigation improvement projects.

Authorization.

SEC. 203. The following works of improvement for the benefit of navigation and the control of destructive floodwaters and other purposes are hereby adopted and authorized to be prosecuted under the direction of the Secretary of the Army and the supervision of the Chief of Engineers in accordance with the plans in the respective reports hereinafter designated and subject to the conditions set forth therein: *Provided*, That the necessary plans, specifications, and preliminary work may be prosecuted on any project authorized in this title with funds from appropriations hereafter made for flood control so as to be ready for rapid inauguration of a construction program: *Provided further*, That the projects authorized herein shall be initiated as expeditiously and prosecuted as vigorously as may be consistent with budgetary requirements: *And provided further*, That penstocks and other similar facilities adapted to possible future use



in the development of hydroelectric power shall be installed in any dam authorized in this Act for construction by the Department of the Army when approved by the Secretary of the Army on the recommendation of the Chief of Engineers and the Federal Power Commission.

#### NEW ENGLAND-ATLANTIC COASTAL AREA

The project for hurricane-flood protection at Wareham-Marion, Massachusetts, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 548, Eighty-seventh Congress, at an estimated cost of \$3,811,500.

The project for navigation and hurricane-flood protection at Point Judith, Rhode Island, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 521, Eighty-seventh Congress, at an estimated cost of \$2,414,000.

The project for navigation and hurricane-flood control protection at Narragansett Pier, Rhode Island, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 195, Eighty-seventh Congress, at an estimated cost of \$1,152,000.

#### LONG ISLAND SOUND AREA

The project for hurricane-flood control protection at New London, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 478, Eighty-seventh Congress, at an estimated cost of \$2,401,000.

The project for hurricane-flood protection at Westport, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 412, Eighty-seventh Congress, at an estimated cost of \$217,000.

The project for hurricane-flood protection at Mystic, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 411, Eighty-seventh Congress, at an estimated cost of \$1,490,000.

#### HOUSATONIC RIVER BASIN

The project for flood protection on the Naugatuck River at Ansonia-Derby, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 437, Eighty-seventh Congress, at an estimated cost of \$5,620,000.

#### HUDSON RIVER BASIN

The project for flood protection on Rondout Creek and Wallkill River and their tributaries, New York and New Jersey, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 113, Eighty-seventh Congress, at an estimated cost of \$5,111,000.

#### NEW JERSEY-ATLANTIC COASTAL AREA

The project for hurricane-flood protection and beach erosion control on Raritan Bay and Sandy Hook Bay, New Jersey, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 464, Eighty-seventh Congress, at an estimated cost of \$3,097,000.

## SUSQUEHANNA RIVER BASIN

The project for construction of the Fall Brook and Ayleworth Creek Reservoirs, and local flood protection works on the Lackawanna River at Scranton, Pennsylvania, is hereby authorized substantially as recommended by the Chief of Engineers, in Senate Document Numbered 141, Eighty-seventh Congress, at an estimated cost of \$3,596,000.

The project for the Juniata River and tributaries, Pennsylvania, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 565, Eighty-seventh Congress, at an estimated cost of \$32,150,000: *Provided*, That installation of the power generating facilities shall not be made until the Chief of Engineers shall submit a reexamination report to the Congress for authorization.

## DELAWARE RIVER BASIN

The project for the comprehensive development of the Delaware River Basin, New York, New Jersey, Pennsylvania, and Delaware, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers, in House Document Numbered 529, Eighty-seventh Congress, at an estimated cost of \$192,400,000.

## POTOMAC RIVER BASIN

The project for the North Branch of the Potomac River, Maryland and West Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers, in House Document Numbered 469, Eighty-seventh Congress, at an estimated cost of \$50,965,000.

## MIDDLE ATLANTIC COASTAL AREA

The project for hurricane-flood protection at Norfolk, Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 354, Eighty-seventh Congress, at an estimated cost of \$1,537,000.

The project for hurricane-flood protection and beach erosion control at Wrightsville Beach, North Carolina, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 511, Eighty-seventh Congress, at an estimated cost of \$345,000.

The project for hurricane-flood protection and beach erosion control at Carolina Beach and vicinity, North Carolina, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 418, Eighty-seventh Congress, at an estimated cost of \$739,000.

## APALACHICOLA RIVER BASIN, GEORGIA

The project for the West Point Reservoir, Chattahoochee River, Georgia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 570, Eighty-seventh Congress, at an estimated cost of \$52,900,000.

## CENTRAL AND SOUTHERN FLORIDA

The comprehensive plan for flood control and other purposes in central and southern Florida approved in the Act of June 30, 1948,



and subsequent Acts of Congress, is hereby modified to include the following items:

The project for flood protection of West Palm Beach Canal is hereby authorized substantially as recommended by the Secretary of the Army and the Chief of Engineers in Senate Document Numbered 146, Eighty-seventh Congress, at an estimated cost of \$3,220,000.

The project for flood protection on Boggy Creek, Florida, is hereby authorized substantially as recommended by the Chief of Engineers in Senate Document Numbered 125, Eighty-seventh Congress, at an estimated cost of \$1,176,000.

The project for South Dade County, Florida, is hereby authorized substantially in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers in Senate Document Numbered 138, Eighty-seventh Congress, at an estimated cost of \$13,388,000.

The project for Shingle Creek, Florida, between Clear Lake and Lake Tohopekaliga, for flood control and major drainage is hereby authorized substantially as recommended by the Chief of Engineers in Senate Document Numbered 139, Eighty-seventh Congress, at an estimated cost of \$3,250,000: *Provided*, That no obligation shall be incurred for development of the Reedy Creek Swamp as a wildlife management area unless the State or one or more other non-Federal entities shall have entered into an agreement in advance to assume at least 50 per centum of the cost associated with that feature of the project.

The project for flood protection in the Cutler drain area, Florida, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 123, Eighty-seventh Congress, at an estimated cost of \$2,063,000: *Provided*, That local interests shall receive credit in the Contributed Fund Account of the project for moneys shown to have been spent after March 1, 1960, for construction of units of the authorized plan for Cutler Drain: *Provided further*, That such completed work must be inspected and accepted by the Chief of Engineers as constituting useful parts of the authorized plan: *And provided further*, That the credit established shall be in accordance with cost sharing arrangements for the central and southern Florida flood control project in an amount not to exceed \$124,000.

#### GREEN SWAMP REGION, FLORIDA

The project for the Four River Basins, Florida, namely the Hillsborough, Oklawaha, Withlacoochee, and Peace Rivers, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 585, Eighty-seventh Congress, at an estimated cost of \$57,760,000: *Provided*, That the cost sharing shall be as recommended by the Secretary of the Army in House Document Numbered 585, Eighty-seventh Congress: *And provided further*, That planning and construction on the Lowery-Mattie Conservation Area and its appurtenant works is deferred until additional studies are made thereon, and a further report submitted to the Congress.

Lowery-Mattie  
Conservation  
Area.  
Additional  
studies.

#### PASCAGOULA RIVER BASIN

The project for flood protection on the Chunky Creek, Chickasawhay and Pascagoula Rivers, Mississippi, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 549, Eighty-seventh Congress, at an estimated cost of \$6,740,000.

## LOWER MISSISSIPPI RIVER BASIN

45 Stat. 534.  
33 USC 702a-  
702m, 704.

The project for flood control and improvement of the lower Mississippi River adopted by the Act approved May 15, 1928, as amended by subsequent Acts, is hereby modified and expanded to include the following item:

(a) Monetary authorizations heretofore and hereafter made available to the project or any portion thereof shall be combined into a single sum and be available for application to any portion of the project.

The project for flood control and improvement of the lower Mississippi River, adopted by the Act of May 15, 1928, as amended, is hereby modified and expanded to include construction of certain improvements in Gin and Muddy Bayous, Yazoo River Basin, Mississippi, substantially in accordance with plans on file in the Office, Chief of Engineers, subject to the approval of such plans by the Secretary of the Army and the President, at an estimated cost of \$150,000.

The project for hurricane-flood protection on the Mississippi River Delta at and below New Orleans, Louisiana, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 550, Eighty-seventh Congress, at an estimated cost of \$7,502,000.

The project for flood protection on Red River in Natchitoches and Red River Parishes, Louisiana, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 476, Eighty-seventh Congress, at an estimated cost of \$1,293,000.

Will M.  
Whittington  
Auxiliary  
Channel.  
Designation.

The lower auxiliary channel, Yazoo River Basin, Mississippi, a unit in the Mississippi River and tributaries project, shall hereafter be known and designated as the Will M. Whittington Auxiliary Channel in honor of the late Member of the House of Representatives from the Third District of Mississippi, and former chairman of the House Public Works Committee. The Secretary of the Army, acting through the Chief of Engineers, United States Army, is hereby authorized and directed to erect appropriate markers along the auxiliary channel designating the project "The Will M. Whittington Auxiliary Channel". Any law, regulation, document, or record of the United States in which such project is designated or referred to under the name of lower auxiliary channel, Yazoo River Basin, Mississippi, shall be held and considered to refer to such project by the name of "Will M. Whittington Auxiliary Channel".

## BUFFALO BAYOU

The project for flood protection on Vince and Little Vince Bayous, Texas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 441, Eighty-seventh Congress, at an estimated cost of \$2,224,000.

## GULF OF MEXICO

The project for hurricane-flood protection at Port Arthur and vicinity, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 505, Eighty-seventh Congress, at an estimated cost of \$23,380,000.

The project for hurricane-flood protection at Freeport and vicinity, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 495, Eighty-seventh Congress, at an estimated cost of \$3,780,000.



## TRINITY RIVER BASIN

The project for flood protection on the East Fork of the Trinity River, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 554, Eighty-seventh Congress, at an estimated cost of \$23,760,000.

The project for extension of the Fort Worth Floodway, Texas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 454, Eighty-seventh Congress, at an estimated cost of \$5,148,000.

## BRAZOS RIVER BASIN

The project for the San Gabriel River, Texas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 591, Eighty-seventh Congress, at an estimated cost of \$20,250,000.

The project for flood protection on the Clear Fork of the Brazos River at and in the vicinity of Abilene, Texas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 506, Eighty-seventh Congress, at an estimated cost of \$31,200,000.

## TULAROSA BASIN

The project for flood protection at Alamogordo, New Mexico, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 473, Eighty-seventh Congress, at an estimated cost of \$2,040,000.

## RIO GRANDE BASIN

The project for flood protection at Las Cruces, New Mexico, is hereby authorized substantially as recommended by the Chief of Engineers in Senate Document Numbered 117, Eighty-seventh Congress, at an estimated cost of \$3,350,000.

## ARKANSAS RIVER BASIN

The Dardanelle lock and dam, Arkansas River, Arkansas, is hereby modified to provide for construction of a sewage outfall system for the city of Russellville, Arkansas, substantially in accordance with plans of said city, approved by the Chief of Engineers, at an estimated cost of \$1,400,000.

The Secretary of the Army is hereby authorized and directed to cause an immediate study to be made under the direction of the Chief of Engineers of bank erosion on the Arkansas River between about river mile 455, near Muskogee, Oklahoma, and about river mile 495, near Coweta, Oklahoma. Such project or projects, because of its or their emergency nature, are hereby authorized as determined to be feasible and justified by the Chief of Engineers and Secretary of the Army with the approval of the President unless within the first period of sixty calendar days of continuous session of the Congress after the date on which the report is submitted to it such report is disapproved by the Congress: *Provided*, That the requirements for cooperation shall include provisions that local interests shall furnish all lands, easements, and rights-of-way; hold and save the United States free from damages; maintain and operate after completion; and make a cash contribution in recognition of any special benefits: *And provided further*, That with respect to any work found justified

in the vicinity of Wybark, Oklahoma, local interests shall meet the requirements as stated and shall make a cash contribution of not less than \$150,000 which shall include the value of all lands, easements, and rights-of-way required to be furnished, and the value of goods and services provided for purposes of project installation on a basis acceptable to the Chief of Engineers: *Provided*, That the cost to the Federal Government shall not exceed \$2,000,000.

The project for improvement of the Verdigris River and tributaries, Oklahoma and Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 563, Eighty-seventh Congress, at an estimated cost of \$62,400,000.

The project for flood protection on Big Hill Creek, Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 577, Eighty-seventh Congress, at an estimated cost of \$3,785,000.

The project for the Kaw Reservoir, Arkansas River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 143, Eighty-seventh Congress, at an estimated cost of \$83,230,000: *Provided*, That nothing in this Act shall be construed as authorizing the acquisition of additional lands for establishment of a national wildlife refuge at the reservoir.

The project for flood protection on Cow Creek, Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 531, Eighty-seventh Congress, at an estimated cost of \$1,560,000.

The project for flood protection on the Arkansas River at Dodge City, Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 498, Eighty-seventh Congress, at an estimated cost of \$2,133,000.

#### WHITE RIVER BASIN

The flood protection project for Village Creek, Jackson and Lawrence Counties, Arkansas, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 352, Eighty-seventh Congress, at an estimated cost of \$1,968,000.

The project for flood protection on Village Creek, White River, and Mayberry Levee Districts, Arkansas, is hereby modified to provide for construction of a pumping plant, substantially as recommended by the Chief of Engineers in House Document Numbered 577, Eighty-seventh Congress, at an estimated additional cost of \$1,018,000.

#### RED RIVER BASIN

That the general plan for flood control and other purposes on Red River below Denison Dam is hereby modified to authorize the Chief of Engineers to adjust the local cooperation requirements of the McKinney Bayou, Arkansas and Texas, Maniece Bayou, Arkansas, and East Point, Louisiana, projects so as to bring such requirements in accord with the recommendations of the Secretary of the Army and approval of the President, such adjustment to be made at the earliest practicable date.

The project for Sanders, Big Pine, and Collier Creeks, Texas, is hereby authorized substantially as recommended by the Chief of Engineers, at an estimated cost of \$16,100,000, subject to the recommendations of the Secretary of the Army and approval of the President.

The project for Lake Kemp, Wichita River, Texas, is hereby authorized substantially in accordance with the recommendations of the



Chief of Engineers in Senate Document Numbered 144, Eighty-seventh Congress, at an estimated cost of \$6,410,000.

The modification of the Broken Bow Reservoir, Mountain Fork River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 137, Eighty-seventh Congress, at an estimated cost of \$23,800,000.

The project for the Clayton and Tuskahoma Reservoirs, Kiamichi River, Oklahoma, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 145, Eighty-seventh Congress, at an estimated cost of \$29,748,000.

The project providing for the construction of two experimental water quality study projects in the Arkansas-Red River Basins, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 105, Eighty-seventh Congress, at an estimated cost of \$300,000.

MISSOURI RIVER BASIN

(a) The Kaysinger Bluff Reservoir, Osage River, Missouri, is hereby modified substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 578, Eighty-seventh Congress, at an estimated additional cost of \$43,245,000: *Provided*, That nothing in this Act shall be construed as authorizing the acquisition of additional lands for the establishment of a national wild-life refuge at the reservoir.

(b) The project for the Kansas River, Kansas, Nebraska, and Colorado, is hereby authorized substantially in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers in Senate Document Numbered 122, Eighty-seventh Congress, at an estimated cost of \$88,070,000: *Provided*, That the authorization for the Woodbine Reservoir on Lyons Creek is deferred at this time, subject to submission of a new feasibility report to the Eighty-eighth Congress, which shall take into account the water and related land resource development plans of the Soil Conservation Service, the Kansas Water Resources Board, and Lyons Creek Watershed Joint District Numbered 41, and preparation of said report is hereby authorized.

Woodbine  
Reservoir, Kans.  
Authorization  
deferred.

Report to  
Congress.

The project for flood protection on White Clay Creek at Atchison, Kansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 151, Eighty-seventh Congress, at an estimated cost of \$3,495,000.

The project for flood protection on Papillion Creek and tributaries, Nebraska, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 475, Eighty-seventh Congress, at an estimated cost of \$2,122,000.

The project for flood protection on Indian Creek, Iowa, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 438, Eighty-seventh Congress, at an estimated cost of \$1,270,000.

The project for Grand River and tributaries, North and South Dakota, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 574, Eighty-seventh Congress, at an estimated cost of \$2,670,000: *Provided*, That the project shall be constructed, operated, and maintained by the Chief of Engineers under the direction of the Secretary of the Army.

Floyd River,  
Iowa.  
Modification  
of project.  
72 Stat. 312.

The requirements of local cooperation on the project for flood control on the Floyd River, Iowa, authorized by Public Law 85-500, as recommended by the Chief of Engineers in House Document Numbered 417, Eighty-fourth Congress, is hereby modified to read as follows: "*Provided*, That responsible local interests give assurances satisfactory to the Secretary of the Army that they will (a) furnish without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project; (b) hold and save the United States free from damages due to the construction works; (c) make without cost to the United States all necessary road, highway, highway bridges other than those required to carry Interstate Highway 29 over the relocated Floyd River, and utility alterations and additions; (d) contribute in cash 0.84 per centum of the estimated first cost of the work for which the United States would be responsible, a contribution presently estimated at \$65,000; (e) upon authorization of the project, to take all possible action under Iowa law, short of actual purchase, to prevent additional developments within the right-of-way that might increase the overall cost of the project; and (f) maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army."

#### OHIO RIVER BASIN

The project for flood protection on the Kokosing River, Ohio, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 220, Eighty-seventh Congress, at an estimated cost of \$2,438,000.

The project for flood protection on the Wabash River at and in the vicinity of Mount Carmel, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 573, Eighty-seventh Congress, at an estimated cost of \$1,417,000.

The project for flood protection on the Mad River above Huffman Dam, Ohio, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 439, Eighty-seventh Congress, at an estimated cost of \$7,930,000.

The project for the Kentucky River, Kentucky, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 423, Eighty-seventh Congress, at an estimated cost of \$26,020,000.

The project for Twelvepole Creek, West Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 520, Eighty-seventh Congress, at an estimated cost of \$11,000,000.

The project for the Guyandot River and tributaries, West Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 569, Eighty-seventh Congress, second session, at an estimated cost of \$60,477,000.

The project for flood protection on the Buckhannon River, West Virginia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 43, Eighty-seventh Congress, at an estimated cost of \$1,206,000.

The project for flood protection on Crab Creek at Youngstown, Ohio, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 440, Eighty-seventh Congress, at an estimated cost of \$2,268,000.

The project for the Scioto River, Ohio, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 587, Eighty-seventh Con-



gress, at an estimated cost of \$55,307,000: *Provided*, That nothing in this Act shall be construed as authorizing the acquisition of additional lands for the establishment of a wildlife refuge in this project.

The project for flood protection on the Allegheny River at Salamanca, New York, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 166, Eighty-seventh Congress, at an estimated cost of \$1,390,000.

The project for French Creek, Pennsylvania, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 95, Eighty-seventh Congress, at an estimated cost of \$23,102,000.

The project for the Saline River and tributaries, Illinois, authorized by the Flood Control Act of 1958 (Public Law 85-500) is hereby modified to authorize the Chief of Engineers to adjust the cash contribution required of local interests to such amount as is recommended by the Secretary of the Army and approved by the President, such adjustment to be made at the earliest practicable date. 72 Stat. 312.

#### UPPER MISSISSIPPI RIVER BASIN

The project for the Illinois River and tributaries, Illinois, Wisconsin, and Indiana, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 472, Eighty-seventh Congress, at an estimated cost of \$71,465,000.

The project for Rend Lake, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 541, Eighty-seventh Congress, at an estimated cost of \$35,500,000.

The project for flood protection on the Mississippi River at and in the vicinity of Guttenberg, Iowa, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 286, Eighty-seventh Congress, at an estimated cost of \$729,000.

The project for flood protection on the Mississippi River between Sainte Genevieve and Saint Marys, Missouri, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 519, Eighty-seventh Congress, at an estimated cost of \$2,500,000.

The project for the Harrisonville and Ivy Landing Drainage and Levee District Numbered 2, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 542, Eighty-seventh Congress, at an estimated cost of \$1,112,000.

The project for the Columbia Drainage and Levee District Numbered 3, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 543, Eighty-seventh Congress, at an estimated cost of \$986,000.

The project for the Prairie DuPont Levee and Sanitary District, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 540, Eighty-seventh Congress, at an estimated cost of \$921,000.

The project for flood protection on Richland Creek, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 571, Eighty-seventh Congress, at an estimated cost of \$4,995,000.

The project for the Joanna Reservoir, Salt River, Missouri, is hereby authorized substantially in accordance with the recommenda-

tions of the Chief of Engineers in House Document Numbered 507, Eighty-seventh Congress, at an estimated cost of \$63,300,000.

The project for flood protection on the Pecatonica River, Illinois and Wisconsin, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 539, Eighty-seventh Congress, at an estimated cost of \$850,000.

The project for flood protection on Rock River at Rockford, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 142, Eighty-seventh Congress, at an estimated cost of \$7,228,000.

The project for the Mississippi River urban areas from Hampton, Illinois, to mile 300, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 564, Eighty-seventh Congress, at an estimated cost of \$9,289,000.

The project for the Mississippi River urban areas from Hampton, Illinois, to Cassville, Wisconsin, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 450, Eighty-seventh Congress, at an estimated cost of \$5,350,000.

The project for the Kickapoo River, Wisconsin, is hereby authorized substantially as recommended by the Chief of Engineers in House Document Numbered 557, Eighty-seventh Congress, at an estimated cost of \$15,570,000.

The project for flood protection on the Warroad River and Bull Dog Creek, Minnesota, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 449, Eighty-seventh Congress, at an estimated cost of \$972,000.

#### GREAT LAKES BASIN

The project for flood protection on the River Rouge, Michigan, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 148, Eighty-seventh Congress, at an estimated cost of \$8,659,000.

The project for flood protection on the Sandusky River, Ohio, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 136, Eighty-seventh Congress, at an estimated cost of \$4,300,000.

#### GILA RIVER BASIN

The project for the Camelsback Reservoir, Gila River, Arizona, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 127, Eighty-seventh Congress, at an estimated cost of \$9,770,000.

The project for flood protection on the Gila River below Painted Rock Reservoir, Arizona, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 116, Eighty-seventh Congress, at an estimated cost of \$18,255,000.

The project for flood protection on Pinal Creek, Arizona, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 512, Eighty-seventh Congress, at an estimated cost of \$1,300,000.



## TRUCKEE RIVER BASIN

The project for flood protection on the Truckee River and tributaries, California and Nevada, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 435, Eighty-seventh Congress, at an estimated cost of \$2,385,000.

## SAN FRANCISCO BAY AREA

The project for flood protection on Alameda Creek, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 128, Eighty-seventh Congress, at an estimated cost of \$14,680,000.

The project for Corte Madera Creek, Marin County, California, is hereby authorized substantially in accordance with the recommendations of the Secretary of the Army and the Chief of Engineers in House Document Numbered 545, Eighty-seventh Congress, at an estimated cost of \$5,534,000: *Provided*, That local interests shall contribute in cash 3 per centum of the Federal construction of the Rose Valley Unit with a contribution presently estimated at \$158,000.

## SAN JOAQUIN RIVER BASIN

The New Melones project, Stanislaus River, California, authorized by the Flood Control Act approved December 22, 1944 (58 Stat. 887), is hereby modified substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 453, Eighty-seventh Congress, at an estimated cost of \$113,717,000: *Provided*, That upon completion of construction of the dam and powerplant by the Corps of Engineers, the project shall become an integral part of the Central Valley project and be operated and maintained by the Secretary of the Interior pursuant to the Federal reclamation laws, except that the flood control operation of the project shall be in accordance with the rules and regulations prescribed by the Secretary of the Army: *Provided further*, That the Stanislaus River Channel, from Goodwin Dam to the San Joaquin River, shall be maintained by the Secretary of the Army to a capacity of at least eight thousand cubic feet per second subject to the condition that responsible local interests agree to maintain private levees and to prevent encroachment on the existing channel and floodway between the levees: *Provided further*, That before initiating any diversions of water from the Stanislaus River Basin in connection with the operation of the Central Valley project, the Secretary of the Interior shall determine the quantity of water required to satisfy all existing and anticipated future needs within that basin and the diversions shall at all times be subordinate to the quantities so determined: *Provided further*, That the Secretary of the Army adopt appropriate measures to insure the preservation and propagation of fish and wildlife in the New Melones project and shall allocate to the preservation and propagation of fish and wildlife, as provided in the Act of August 14, 1946 (60 Stat. 1080), an appropriate share of the cost of constructing the Stanislaus River diversion and of operating and maintaining the same: *Provided further*, That the Secretary of the Army, in connection with the New Melones project, construct basic public recreation facilities, acquire land necessary for that purpose, the cost of constructing such facilities and acquiring such lands to be non-reimbursable and nonreturnable: *Provided further*, That contracts for the sale and delivery of the additional electric energy available from the Central Valley project power system as a result of the con-

58 Stat. 901.

43. USC 371  
et seq.Fish and  
wildlife  
preservation.16 USC 661-  
666c.

struction of the plants herein authorized and their integration with that system shall be made in accordance with preferences expressed in the Federal reclamation laws except that a first preference, to the extent as needed and as fixed by the Secretary of the Interior, but not to exceed 25 per centum of such additional energy, shall be given, under reclamation law, to preference customers in Tuolumne and Calaveras Counties, California, for use in that county, who are ready, able, and willing, within twelve months after notice of availability by the Secretary of the Interior, to enter into contracts for the energy and that Tuolumne and Calaveras County preference customers may exercise their option in the same date in each successive fifth year providing written notice of their intention to use the energy is given to the Secretary not less than eighteen months prior to said dates: *And provided further*, That the Secretary of the Army give consideration during the preconstruction planning for the New Melones project to the advisability of including storage for the regulation of stream-flow for the purpose of downstream water quality control.

The Hidden Reservoir, Fresno River, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 37, Eighty-seventh Congress, at an estimated cost of \$14,338,000.

The Buchanan Reservoir, Chowchilla River, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 98, Eighty-seventh Congress, at an estimated cost of \$13,585,000.

The project for flood protection on Mormon Slough, Calaveras River, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 576, Eighty-seventh Congress, at an estimated cost of \$1,960,000.

#### RUSSIAN RIVER BASIN

The project for Russian River, Dry Creek, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 547, Eighty-seventh Congress, at an estimated cost of \$42,400,000.

#### REDWOOD CREEK BASIN

The project for flood protection on Redwood Creek, Humboldt County, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 497, Eighty-seventh Congress, at an estimated cost of \$2,580,000.

#### LOS ANGELES RIVER BASIN

In addition to previous authorizations, there is hereby authorized to be appropriated the sum of \$3,700,000 for the prosecution of the comprehensive plan for the Los Angeles River Basin approved in the Act of August 18, 1941, as amended and supplemented by subsequent Acts of Congress.

#### ROGUE RIVER BASIN

The project for the Rogue River, Oregon and California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 566, Eighty-seventh Congress, at an estimated cost of \$106,700,000, subject to the conditions of local cooperation specified in said report: *Provided*, That the project is to be located, constructed, and operated to accomplish the benefits as set forth and described in the report and appendixes: *And provided further*, That in the years of short water supply all



water users will share the available water in the same proportions that they would share the total full supply when it is available, and that no further water-use allocations will be made from the authorized storage so as to retain the maximum possible benefits to authorized uses during the periods of adversity when storage shortages occur.

#### COLUMBIA RIVER BASIN

The projects and plans for the Columbia River Basin, including the Willamette River Basin, authorized by the Flood Control Act of June 28, 1938, and subsequent Acts of Congress, including the Flood Control Acts of May 17, 1950, September 3, 1954, July 3, 1958, and July 14, 1960, are hereby modified to include the projects listed below for flood control and other purposes in the Columbia River Basin (including the Willamette River Basin) substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 403, Eighty-seventh Congress: *Provided*, That the depth and width of the authorized channel in the Columbia-Snake River barge navigation project shall be established as fourteen feet and two hundred and fifty feet, respectively, at minimum regulated

52 Stat. 1222;  
64 Stat. 177,  
178;  
68 Stat. 1264;  
72 Stat. 315;  
74 Stat. 499.

Asotin Dam, Snake River, Idaho and Washington;  
Bruces Eddy Dam and Reservoir, North Fork, Clearwater River, Idaho;  
Strube Reregulating Dam and Reservoir, South Fork, McKenzie River, Oregon;  
Gate Creek Dam and Reservoir, Gate Creek, Oregon;  
Fern Ridge Dam and Reservoir modification, Long Tom River, Oregon;  
Cascadia Dam and Reservoir, South Santiam River, Oregon.

The project for the Ririe Dam and Reservoir, Willow Creek, Idaho, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 562, Eighty-seventh Congress, at an estimated cost of \$7,027,000.

The project for the Blackfoot Dam and Reservoir, Blackfoot River, Idaho, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 568, Eighty-seventh Congress, at an estimated cost of \$829,000.

#### WYNOOCHEE RIVER

The project for the Wynoochee River, Washington, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 601, Eighty-seventh Congress, at an estimated cost of \$40,211,000: *Provided*, That the installation of the power-generating facilities shall not be made until the Chief of Engineers shall submit a reexamination report to the Congress for authorization.

Reexamination  
report to  
Congress.

#### COOK INLET, ALASKA

The project for Bradley Lake, Cook Inlet, Alaska, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 455, Eighty-seventh Congress, at an estimated cost of \$45,750,000.

SEC. 204. (a) For the purpose of developing hydroelectric power and to encourage and promote the economic development of and to foster the establishment of essential industries in the State of Alaska, and for other purposes, the Secretary of the Army, acting through the Chief of Engineers, is authorized to construct and the Secretary of the

Alaska.  
Hydroelectric  
power develop-  
ment.

Interior is authorized to operate and maintain the Crater-Long Lakes division of the Snettisham project near Juneau, Alaska. The works of the division shall consist of pressure tunnels, surge tanks, penstocks, a powerplant, transmission facilities, and related facilities, all at an estimated cost of \$41,634,000.

Sale of power  
and energy.

(b) Electric power and energy generated at the division except that portion required in the operation of the division, shall be disposed of by the Secretary of the Interior in such a manner as to encourage the most widespread use thereof at the lowest possible rates to consumers consistent with sound business principles. Rate schedules shall be drawn having regard to the recovery of the costs of producing and transmitting the power and energy, including the amortization of the capital investment over a reasonable period of years, with interest at the average rate (which rate shall be certified by the Secretary of the Treasury) paid by the United States on its marketable long-term securities outstanding on the date of this Act and adjusted to the nearest one-eighth of 1 per centum. In the sale of such power and energy, preference shall be given to Federal agencies, public bodies, and cooperatives. It shall be a condition of every contract made under this Act for the sale of power and energy that the purchaser, if it be a purchaser for resale, will deliver power and energy to Federal agencies or facilities thereof within its transmission area at a reasonable charge for the use of its transmission facilities. All receipts from the transmission and sale of electric power and energy generated at said division shall be covered into the Treasury of the United States to the credit of miscellaneous receipts.

Contract  
authority.

(c) The appropriate Secretary is authorized to perform any and all acts and enter into such agreements as may be appropriate for the purpose of carrying the provisions of this Act into full force and effect, including the acquisition of rights and property, and the Secretary of the Army, when an appropriation shall have been made for the commencement of construction or the Secretary of the Interior in the case of operation and maintenance of said division, may, in connection with the construction or operation and maintenance of such division, enter into contracts for miscellaneous services for materials and supplies, as well as for construction, which may cover such periods of time as the appropriate Secretary may consider necessary but in which the liability of the United States shall be contingent upon appropriations being made therefor.

Small projects.  
64 Stat. 183;  
70 Stat. 522.

SEC. 205. Section 205 of the Flood Control Act of 1948, as amended (33 U.S.C. 701s), is amended (a) by striking out "\$10,000,000" and inserting in lieu thereof "\$25,000,000", (b) by striking out the term "small flood control projects" and inserting in lieu thereof the term "small projects for flood control and related purposes", and (c) by striking out "Provided, That not more than \$400,000 shall be allotted for this purpose at any single locality from the appropriations for any one fiscal year" and inserting in lieu thereof "Provided, That not more than \$1,000,000 shall be allotted under this section for a project at any single locality and the amount allotted shall be sufficient to complete Federal participation in the project".

Flood emergency  
preparation.  
69 Stat. 186.

SEC. 206. The first sentence of section 5 of the Flood Control Act approved August 18, 1941, as amended (33 U.S.C. 701n), is hereby further amended to read as follows: "That there is hereby authorized an emergency fund in the amount of \$15,000,000 to be expended in flood emergency preparation, in flood fighting and rescue operations, or in the repair or restoration of any flood control work threatened or destroyed by flood, including the strengthening, raising, extending, or other modification thereof as may be necessary in the discretion of the Chief of Engineers for the adequate functioning of the work for flood



control; in the emergency protection of federally authorized hurricane or shore protection being threatened when in the discretion of the Chief of Engineers such protection is warranted to protect against imminent and substantial loss to life and property; in the repair and restoration of any federally authorized hurricane or shore protective structure damaged or destroyed by wind, wave, or water action of other than an ordinary nature when in the discretion of the Chief of Engineers such repair and restoration is warranted for the adequate functioning of the structure for hurricane or shore protection."

SEC. 207. Section 4 of the Act entitled "An Act authorizing the construction of certain public works on rivers and harbors for flood control, and for other purposes", approved December 22, 1944, as amended by section 4 of the Flood Control Act of July 24, 1946, and by section 209 of the Flood Control Act of 1954, is hereby further amended to read as follows:

"SEC. 4. The Chief of Engineers, under the supervision of the Secretary of the Army, is authorized to construct, maintain, and operate public park and recreational facilities at water resource development projects under the control of the Department of the Army, to permit the construction of such facilities by local interests (particularly those to be operated and maintained by such interests), and to permit the maintenance and operation of such facilities by local interests. The Secretary of the Army is also authorized to grant leases of lands, including structures or facilities thereon, at water resource development projects for such periods, and upon such terms and for such purposes as he may deem reasonable in the public interest: *Provided*, That leases to nonprofit organizations for park or recreational purposes may be granted at reduced or nominal considerations in recognition of the public service to be rendered in utilizing the leased premises: *Provided further*, That preference shall be given to Federal, State, or local governmental agencies, and licenses or leases where appropriate, may be granted without monetary considerations, to such agencies for the use of all or any portion of a project area for any public purpose, when the Secretary of the Army determines such action to be in the public interest, and for such periods of time and upon such conditions as he may find advisable: *And provided further*, That in any such lease or license to a Federal, State, or local governmental agency which involves lands to be utilized for the development and conservation of fish and wildlife, forests, and other natural resources, the licensee or lessee may be authorized to cut timber and harvest crops as may be necessary to further such beneficial uses and to collect and utilize the proceeds of any sales of timber and crops in the development, conservation, maintenance, and utilization of such lands. Any balance of proceeds not so utilized shall be paid to the United States at such time or times as the Secretary of the Army may determine appropriate. The water areas of all such projects shall be open to public use generally, without charge, for boating, swimming, bathing, fishing, and other recreational purposes, and ready access to and exit from such areas along the shores of such projects shall be maintained for general public use, when such use is determined by the Secretary of the Army not to be contrary to the public interest, all under such rules and regulations as the Secretary of the Army may deem necessary. No use of any area to which this section applies shall be permitted which is inconsistent with the laws for the protection of fish and game of the State in which such area is situated. All moneys received by the United States for leases or privileges shall be deposited in the Treasury of the United States as miscellaneous receipts."

Public park  
and recreational  
facilities.  
68 Stat. 1266.  
16 USC 460d.

Public use  
of water  
areas.

Protection  
of fish and  
game.

Utilization of  
public roads.  
33 USC 701r-1.

SEC. 208. Section 207 of the Flood Control Act of 1960 (74 Stat. 501) is hereby amended to read as follows:

"SEC. 207. (a) When used in this section—

"(1) The term 'Agency' means the Corps of Engineers, United States Army or the Bureau of Reclamation, United States Department of the Interior, whichever has jurisdiction over the project concerned.

"(2) The term 'head of the Agency concerned' means the Chief of Engineers or the Commissioner, Bureau of Reclamation, or their respective designees.

"(3) The term 'water resources projects to be constructed in the future' includes all projects not yet actually under construction, and, to the extent of work remaining to be completed, includes projects presently under construction where road relocations or identifiable components thereof are not complete as of the date of this section.

"(4) The term 'time of the taking' is the date of the relocation agreement, the date of the filing of a condemnation proceeding, or a date agreed upon between the parties as the date of taking.

"(b) Whenever, in connection with the construction of any authorized flood control, navigation, irrigation, or multiple-purpose project for the development of water resources, the head of the Agency concerned determines it to be in the public interest to utilize existing public roads as a means of providing access to such projects during construction, such Agency may improve, reconstruct, and maintain such roads and may contract with the local authority having jurisdiction over the roads to accomplish the necessary work. The accomplishment of such work of improvement may be carried out with or without obtaining any interest in the land on which the road is located in accordance with mutual agreement between the parties: *Provided*, (1) That the head of the Agency concerned determines that such work would result in a saving in Federal cost as opposed to the cost of providing a new access road at Federal expense, (2) that, at the completion of construction, the head of the Agency concerned will, if necessary, restore the road to at least as good condition as prior to the beginning of utilization for access during construction, and (3) that, at the completion of construction, the responsibility of the Agency for improvement, reconstruction, and maintenance shall cease.

Substitute  
roads.

"(c) For water resources projects to be constructed in the future, when the taking by the Federal Government of an existing public road necessitates replacement, the substitute provided will, as nearly as practicable, serve in the same manner and reasonably as well as the existing road. The head of the Agency concerned is authorized to construct such substitute roads to design standards comparable to those of the State, or, where applicable State standards do not exist, those of the owning political division in which the road is located, for roads of the same classification as the road being replaced. The traffic existing at the time of the taking shall be used in the determination of the classification. In any case where a State or political subdivision thereof requests that such a substitute road be constructed to a higher standard than that provided in the preceding provisions of this subsection, and pays, prior to commencement of such construction, the additional costs involved due to such higher standard, such Agency head is authorized to construct such road to such higher standard. Federal costs under the provisions of this subsection shall be part of the nonreimbursable project costs."

Flood control  
surveys,  
authorization.

SEC. 209. The Secretary of the Army is hereby authorized and directed to cause surveys for flood control and allied purposes, including channel and major drainage improvements, and floods aggravated



by or due to wind or tidal effects, to be made under the direction of the Chief of Engineers, in drainage areas of the United States and its territorial possessions, which include the following named localities: *Provided*, That after the regular or formal reports made on any survey are submitted to Congress, no supplemental or additional report or estimate shall be made unless authorized by law except that the Secretary of the Army may cause a review of any examination or survey to be made and a report thereon submitted to Congress, if such review is required by the national defense or by changed physical or economic conditions: *Provided further*, That the Government shall not be deemed to have entered upon any project for the improvement of any waterway or harbor mentioned in this title until the project for the proposed work shall have been adopted by law:

Valenciana River, Puerto Rico.

Waccasassa River (Levy County and Gilchrist County), Florida.

Lake Pontchartrain, North Shore, Louisiana.

Peytons Creek and tributaries, Texas.

Clear Creek, Texas.

San Bernard River, Texas.

Arkansas River Basin, with reference to the effect of the Eufaula and Keystone Reservoirs, Oklahoma, on the water supply facilities of the cities of McAlester and Yale, respectively, with a view to determining the extent, if any, of Federal participation in the replacement of the cities' water supply facilities in equity without regard to limitation contained in existing Corps of Engineers protective and relocation plans.

Cumberland River, Kentucky and Tennessee, with reference to the effect of the Barkley Dam project, on the water supply and sewage treatment facilities of the cities of Cadiz, Kuttawa, and Eddyville, Kentucky, and the State penitentiary at Eddyville, Kentucky, respectively, with a view to determining the extent, if any, of Federal participation in the replacement of their water supply and sewage treatment facilities in equity without regard to limitation contained in existing Corps of Engineers protective and relocation plans.

Missouri River Basin, with reference to the effect of Oahe and Garrison Reservoirs, North Dakota and South Dakota, on the sewage treatment facilities of the cities of Bismarck and Mandan, North Dakota, respectively, with a view to determining the extent, if any, of Federal participation in the sewage treatment facilities in equity without regard to limitation contained in existing Corps of Engineers protective and relocation plans.

All streams in Santa Barbara County, California, draining the Santa Ynez Mountains, except Santa Ynez River and tributaries.

Sacramento River Basin and streams in northern California draining into the Pacific Ocean for the purposes of developing, where feasible, multiple-purpose water resource projects, particularly those which would be eligible under the provisions of title III of Public Law 85-500.

Battle Creek, Sacramento River, California.

Kaskaskia River levees, Illinois; review of requirements of local cooperation.

Puget Sound, Washington, and adjacent waters, including tributaries, in the interest of flood control, navigation, and other water uses and related land resources.

Harbors and rivers in Hawaii, with a view to determining the advisability of improvements in the interest of navigation, flood control, hydroelectric power development, water supply, and other beneficial water uses, and related land resources.



Waimea River, Kokee Area, Kauai, Hawaii, for multiple purposes.  
Waipio River, Kohala-Hamakua coast, Island of Hawaii, for multiple purpose development.

Iao River, Wailuku, Maui, Hawaii.

Chicot County,  
Ark.  
Bridge replacement authorized.  
58 Stat. 894.

SEC. 210. The Secretary of the Army acting through the Corps of Engineers is hereby authorized to replace with adequate floodway capacity the bridge over Boeuf River, Chicot County, Arkansas approximately three miles north of the county line, and the bridge over Big Bayou, Chicot County, Arkansas, approximately two miles upstream from its confluence with the Boeuf River which were altered as part of the project for Boeuf and Tensas Rivers and Bayou Macon, authorized by the Flood Control Act of December 22, 1944, and which were recently destroyed by floods, at an estimated cost of \$115,000.

W. Kerr Scott  
Dam and Res-  
ervoir.  
Designation.  
60 Stat. 645.

SEC. 211. The Wilkesboro Reservoir flood control project, Yadkin River, North Carolina, authorized by the Flood Control Act of 1946, shall hereafter be known and designated as the W. Kerr Scott Dam and Reservoir, in honor of the late Senator W. Kerr Scott of North Carolina. Any law, regulation, document, or record of the United States in which such project is designated or referred to shall be held and considered to refer to such project by the name of the W. Kerr Scott Dam and Reservoir.

Short title.

SEC. 212. Title II of this Act may be cited as the "Flood Control Act of 1962".

Approved October 23, 1962.





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